

OIL INDIA LIMITED
RAJASTHAN PROJECT
JODHPUR

CORRIGENDUM

TENDER No. CJI5739P18

1.0 Amendment No. 3 dated 08.11.2017 to Tender No. CJI5739P18 has been issued to incorporate changes in Scope of Work(SOW), Bid Evaluation Criteria(BEC), Schedule of Rates, Price Schedule Format, Bid Security amount etc. The Revised Tender Document is furnished below. Bidders to submit bid with reference to the Revised Tender Document.

REVISED TENDER DOCUMENT



ऑयल इंडिया लिमिटेड
(भारत सरकार का उद्यम)
Oil India Limited
(A Government of India Enterprise)

Materials & Contracts Department
(Rajasthan Project)

2A, Saraswati Nagar, Jodhpur-342005

Rajasthan, India. Phone-0291-2729472

Fax : 0291-2727050

E-mails : erp_mm@oilindia.in; anitadam@oilindia.in

Date: 08.11.2017

FORWARDING LETTER

Sub: Hiring of Services for ‘Revival of the Production Surface Setup for Boiler operation and Operation & Maintenance(O&M) of OIL’s Baghewala setup for 2(two) years with a provision of extension by another 01(one) year’.

1.0 OIL INDIA LIMITED (Rajasthan Project) invites ON-LINE Bids from Indigenous bidders for above mentioned works under Single Stage –Two Bid System through its e-Procurement site. For your ready reference, few salient features (Covered in detail in this bid document) are highlighted below.

(i)	IFB No. /E-Tender No.	:	CJI 5739P18
(ii)	Type of Bidding	:	Online-Single Stage-Two Bid System
(iii)	Tender Fee	:	INR 1,000.00 (Tender fee should be paid only through the payment gateway available on OIL’s e-Tender Portal. No other mode of payment shall be accepted.)
(iv)	Period of Sale	:	18.09.2017 to 21.11.2017

(v)	Bid Closing Date & Time	:	28.11.2017 (11:00 Hrs. IST)
(vi)	Technical Bid Opening Date & Time	:	28.11.2017 (15:00 Hrs. IST)
(vii)	Price Bid Opening Date & Time	:	Will be intimated only to the eligible/qualified Bidders nearer the time.
(viii)	Bid Submission Mode	:	Bids must be uploaded online in OIL's E-procurement portal
(ix)	Bid Opening Place	:	Office of the DGM(M&C) Oil India Limited, Jodhpur
(x)	Bid Validity	:	120 days from date of Bid Closing
(xi)	Mobilization Time	:	As defined in the tender
(xii)	Bid Security Amount	:	INR 16,00,000.00
(xiii)	Bid Security Validity	:	31.05.2018
(xiv)	Amount of Performance Security	:	10% of the estd. Annualized contract value.
(xv)	Validity of Performance Security	:	Upto 3 months beyond the date of completion of the contract.
(xvi)	Duration of the Contract	:	03(Three) Months for revival (Part-A) and 2(two) years for O&M
(xvii)	Quantum of Liquidated Damage for Default in Timely Mobilization	:	Refer General Conditions of Contract
(xviii)	Integrity Pact	:	Must be digitally signed & uploaded along with the Techno-commercial Bid.
(xix)	Last date for receipt of pre-bid queries	:	Two days prior to Scheduled Pre Bid Conference
(xx)	Pre-bid Conference date	:	05.10.2017(already held)
(xxi)	Venue of Pre-bid Conference	:	Conference Hall of OIL House, Jodhpur.

2.0 We now look forward to receiving your most competitive offer in line with the tender terms well within the bid closing date and time.

Yours faithfully,

OIL INDIA LIMITED

(A. Dam)
Dy. GENERAL MANAGER (M&C)
For, CHIEF GENERAL MANAGER-SERVICES(RP)
For, EXECUTIVE DIRECTOR (RP)

INVITATION FOR BIDS

- 1.0 Oil India Limited (OIL) invites competitive ON-LINE Bids from Indigenous Service Providers / Contractors for the following services under Single Stage Composite Bid System for its RAJASTHAN PROJECT through its e-Procurement portal <https://etender.srm.oilindia.in/irj/portal>
- 2.0 **Description of Services:: Hiring of Services for ‘Revival of the Production Surface Setup for Boiler operation at Baghewala#6 & Operation & Maintenance(O&M) of OIL’s Baghewala setup for 2(two) years with a provision of extension by another 01(one) year’.**
- 3.0 Tender Document will not be issued physically by Company. The interested Bidders must submit their applications showing full address (including e-mail ID) along with the non-refundable Tender Fee **through online in e-portal** (excepting PSUs and SSI Units registered with NSIC) in favour of OIL INDIA LIMITED between **18.09.2017** and **21.11.2017** i.e., one week prior to the scheduled bid closing date. On receipt of application and Tender Fee as above, USER-ID and initial PASSWORD will be communicated to the bidder (through e-mail) and will be allowed to participate in the tender through OIL’s e-Procurement portal. Details of the NIT can be viewed using “Guest Login” provided in the e-procurement portal. The link to e-procurement portal has also been provided through OIL’s website www.oil-india.com.
- 4.0 OIL reserves the right to refuse issue of User Id & Password to such parties even on payment of tender fee, about whose competence OIL is not satisfied. Company’s decision in this regard shall be final.
- 5.0 OIL reserves the right to reject any/all bids and cancel the tender without assigning any reason whatsoever.

-: Please visit us at www.oil-india.com:-

(END OF SECTION – I)

INSTRUCTIONS TO BIDDERS

- 1.0 Bidder shall bear all costs associated with the preparation and submission of bid. Oil India Limited, hereinafter referred to as Company, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 1.1 Prospective Bidders may interact with Company's Production Department at Jodhpur during working hours to understand the existing facilities, actual requirements and the desired level of services etc., before submitting their bids.

A. BIDDING DOCUMENT / TENDER DOCUMENT

- 2.0 The services required, bidding procedures and contract terms are prescribed in the Bidding Documents. This bidding document includes the following:
- (a) A forwarding letter highlighting the following points:
- (i) Oil India Limited 's Tender No.
 - (ii) Bid closing date and time.
 - (iii) Bid opening date, time and place.
 - (iv) The amount of Bid Security.
 - (v) The amount of performance guarantee.
 - (vi) Quantum of liquidated damages for default in timely mobilization.
- (b) Invitation for Bids & Instructions to Bidders
- (c) Scope of Work (Section - I)
- (d) Schedule of Rates (Section - II)
- (e) Price Bid form (Section - III)
- (f) General Conditions of Contract (Section - IV)
- (g) Bid Evaluation Criteria (Section - V)
- (h) The Bid Form (Section - VI)
- (i) Bid Security format (Section – VII)
- (j) The Performance Security Form (Section - VIII)
- (k) The Contract Form of Agreement (Section - IX)
- (l) General HSE Points (Appendix-A)
- (m) Procedure for obtaining labour license-(Appendix-B)
- (n) Integrity Pact Proforma(Section-X)
- (o) Certificate of Annual Turnover & Net Worth-Annexure-I.

- 2.1 The bidder is expected to examine all instructions, forms, terms and specifications in the Bid Document. Failure to furnish all information required as per the Bid Document or submission of a bid not substantially responsive to the Bid Document in all respect will be at the Bidder's risk & responsibility and may result in rejection of their bids.

3.0 AMENDMENTS TO BIDDING DOCUMENT:

- 3.1 At any time prior to the deadline for submission of bids, the Company may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bid Document through an Addendum.
- 3.2 The Addendum will be uploaded in OIL's e-Portal in the C-folder under tab "Amendments to Tender Documents". Prospective Bidders, shall be intimated about the amendments through e-mail/fax/courier etc. The Company may, at its discretion,

extend the deadline for bid submission, if the Bidders are expected to require additional time in which to take the Addendum into account in preparation of their bid or for any other reason.

B. PREPARATION OF BIDS

4.0 LANGUAGE OF BIDS:

The bid as well as all correspondence and documents relating to the bid exchanged between the Bidder and the Company shall be in English language, except that any printed literature may be in another language, provided it is accompanied by an English version which shall govern for the purpose of bid interpretation.

5.0 DOCUMENTS COMPRISING THE BID:

The bidder should submit their offer under single stage composite bid system i.e., only a single Techno-Commercial Bid comprising of the following documents.

- (i) Complete technical details of the services etc.
- (ii) Documentary evidence establishing Bidder's eligibility as per BEC/BRC defined in Section – V.
- (iii) Bid Security (Scanned Copy) furnished in accordance with Para 10.0 below.
- (iv) Statement of compliance as per **Proforma – I**.
- (v) Bid Form & Price Schedule Details as per Section – VI and Section III respectively.
- (vi) All other Annexure, Proforma and Documents as required in the Tender

6.0 BID FORM:

The bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the Bid Document vide Section – VI & Section III respectively.

7.0 BID PRICE:

- 7.1 Prices must be quoted by the Bidders online in Indian Rupees (INR) strictly as per price bid format available in OIL's E-Portal.
- 7.2 Price quoted by the Successful Bidder must remain firm throughout its performance of the Contract and is not subject to variation on any account, including extension period, if any.
- 7.3 All duties and taxes including Corporate income taxes and levies other than GST payable by the Contractor under the Contract for which this Bid Document is issued, shall be included in the rates, prices and total Bid Price submitted by the bidder, the evaluation and comparison of bids shall be made accordingly. GST as applicable shall be extra and borne by the Company.

8.0 CURRENCIES OF BID AND PAYMENT:

As the tender is issued only to the indigenous (domestic) Bidders, rates must be quoted in Indian Rupees only and payment will accordingly be made in Indian rupees.

9.0 DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY & QUALIFICATIONS

These are listed in Bid Rejection Criteria vide Section – V of the Bidding document

10.0 BID SECURITY:

- 10.1 The **Original Bid Security** for the amount as specified in the "Forwarding Letter" must reach the office of Chief Manager (M & C), Oil India Limited, 2-A, Saraswati Nagar, District Shopping Centre, Basni, Jodhpur-342 005, Rajasthan, India before the scheduled Bid Closing Date and Time of the Tender, otherwise Bid will be rejected.

Tender Number and the Description work must be clearly highlighted on the envelope containing the original Bid Security. A scanned copy of this document should also be uploaded along with the Bid on e-portal.

- 10.2 Pursuant to Para 5.0 above, the Bidder during online submission of its bid shall furnish as part of its Technical Unpriced Bid, Bid Security (scanned copy) in the amount as specified in the "Forwarding Letter".
- 10.3 The Bid Security is required to protect the Company against the risk of Bidder's conduct, which would warrant the security's forfeiture, pursuant to sub-para 10.8 below.
- 10.4 The Bid Security shall be denominated in the currency of the Bid or another freely convertible currency, and shall be in the following forms: -
 - a) A Bank Guarantee issued by a scheduled Bank located in India in the form provided in the Bid document (Ref. Section-VI for the format) with validity up to as mentioned in the Tender document. The bank guarantee/Letter of Credit should be so endorsed that it can be invoked at the issuing bank's branch located at Jodhpur (Rajasthan) India or alternatively at New Delhi, India.
- 10.5 Any Bid not secured in accordance with above-mentioned subparagraphs 10.1 to 10.4 will be rejected by Company as non-responsive, except those are exempted.
- 10.6 Unsuccessful Bidder's Bid Security will be discharged and/or returned immediately after finalisation of the Tender by Company or latest by within 30 days of expiry of the period of bid validity.
- 10.7 Successful Bidder's Bid Security will be discharged upon the Bidder's signing of the contract and furnishing the Performance Security.
- 10.8 The Bid Security will be forfeited:
 - (a) If any Bidder withdraws their bid during the period of bid validity (including any subsequent extension) specified by the Bidder on the Bid Form, or
 - (b) If a Successful Bidder fails:
 - i) To sign the contract within reasonable time and within the period of bid validity, and /or,
 - ii) To furnish Performance Security.
 - iii) To mobilize and/or to commence the assigned jobs within stipulated time frame.

NOTE : Public Sector Undertakings and Small Scale Units registered with NSIC/Directorate of Industries are exempted from submitting bid securities against this tender.

11.0 PERIOD OF VALIDITY OF BIDS:

- 11.1 Bids shall remain valid for 120 days after the date of bid opening prescribed by the Company.
- 11.2 In exceptional circumstances, the Company may solicit the Bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing (by Fax or E-mail). A Bidder may refuse the request without forfeiting their Bid Security. A Bidder granting the request will neither be required nor permitted to

modify their bid but shall arrange suitable validity extension of their bid security provided under para 10.0 above.

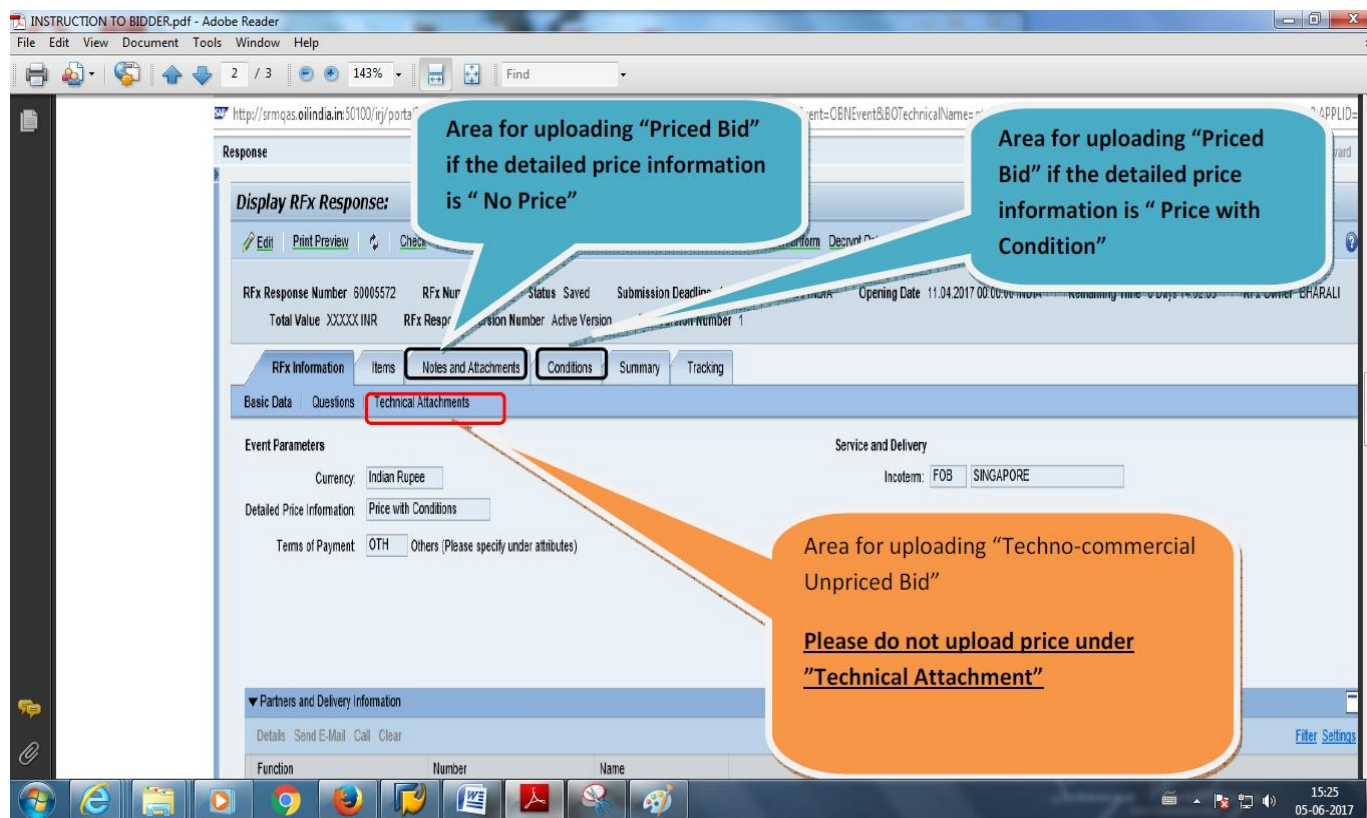
11.3 FORMAT AND SIGNING OF BID:

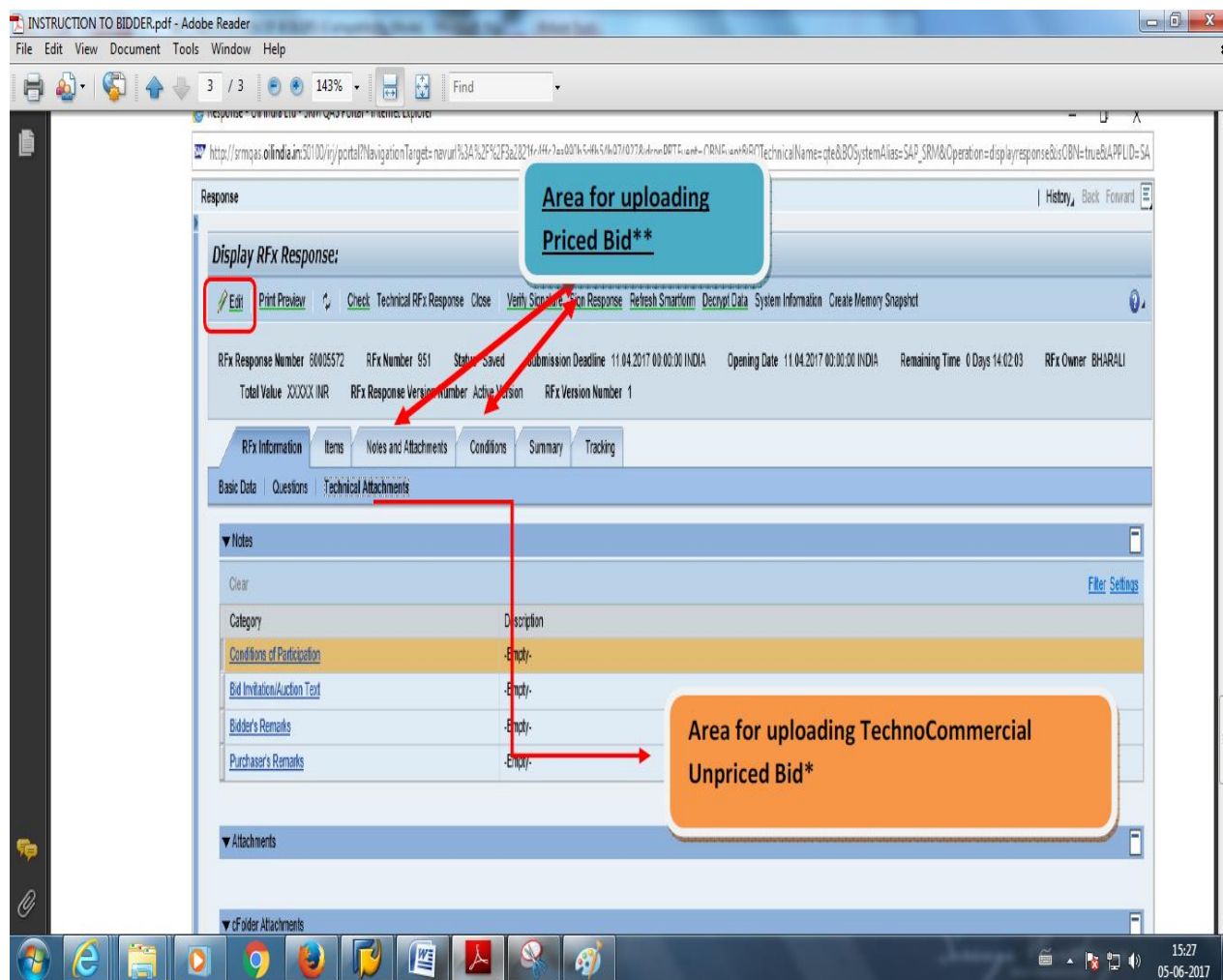
As the Bids are to be submitted ONLINE with digital signature, manual signature is not required

C. SUBMISSION OF BIDS:

12.0 ONLINE SUBMISSION:

- 12.1 The Bid should be submitted online up to 11:00 Hrs. (IST) (Server Time) on the date as mentioned herein i.e., on the scheduled Bid Closing Date. The Bids will be opened on the same day at 15:00 Hrs. (IST) at the office of Chief Manager (M&C), Oil India Limited, 2-A, District Shopping Centre, Saraswati Nagar, Basni, Jodhpur – 342 005, Rajasthan, India in presence of authorized representative of the bidder.
- 12.2 The Rates/Prices along with price related conditions should be filled online in the Price-Bid screen. All other techno-commercial documents other than the cost details to be submitted with “unpriced” bid as per tender requirement placed in the “un-priced” bid folder. No rate/price should be entered in Technical Bid, otherwise the offer will be rejected.
- 12.3 The Bid and all uploaded documents must be digitally signed by duly authorized representative of the bidding company using “Class 3” digital certificate [e-commerce application (Certificate with personal verification and Organization name)] as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.
- 12.4 The Bidder will be responsible for ensuring the validity of digital signature and its proper usage by their employee. The authenticity of above digital signature shall be verified through authorized CA after the bid opening. If the digital signature used for signing is not of “Class-3” with Organization name, the bid will be rejected.
- 12.5 The tender is invited under SINGLE STAGE-TWO BID SYSTEM. The bidders shall submit both the “TECHNICAL” and “PRICED” bids through electronic form in the OIL’s e-Procurement portal within the Bid Closing Date and Time stipulated in the e-Tender portal. The Technical Bid should be submitted as per Scope of Work & Technical Specifications along with all technical documents related to the tender and uploaded in “Technical Attachments” Tab only.
- 12.6 **Bidders to note that no price details should be uploaded in “Technical Attachments” Tab Page, otherwise the offer will be rejected. Details of prices as per Price Bid format/Priced bid to be uploaded under “Notes & Attachments” tab. A screen shot in this regard is shown below. Offer not complying with above submission procedure will be rejected.**





On “EDIT” Mode- The following screen will appear. Bidders are advised to Upload “Techno-Commercial Unpriced Bid” and “Priced Bid” in the places as indicated above:

***The “Techno-Commercial Unpriced Bid” shall contain all techno commercial details except the prices.**

**** Please follow the instructions as per Vendor User Manual for Uploading Price under “Notes and Attachment” or “Condition”**

Note :

* The “Technical Unpriced Bid” shall contain all techno-commercial details **except the prices.**

** The “Price bid” must contain the price schedule and the bidder’s commercial terms and conditions. For uploading Price Bid, first click on Sign Attachment, a browser window will open, select the file from the PC and click on “Sign” to sign the file. On Signing a new file with extension **.SIG** will be created. Close that window. Next click on Add Attachment, a browser window will open, select the **.SIG** signed file from the PC and name the file under Description, Assigned to General Data and click on OK to save the File.

SINGLE STAGE TWO BID SYSTEM shall be followed for this tender and only the PRICED-BIDS of the bidders whose offers are commercially and technically acceptable shall be opened for further evaluation.

- 12.7 In Technical Bid Opening, only the **Technical Attachments Response** will be opened. **Please do refer the User Manual provided on the portal on the procedure “How to create Response” for submitting offer.**

NB : All the Bids must be digitally signed using “Class-3” digital signature certificate with Organizations Name (e-commerce application) as per Indian IT Act obtained from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCAI), Controller of Certifying Authorities (CCA) of India.

- 12.8 The offer should contain complete specifications, details of services and equipment/accessories offered together with other relevant literature/ catalogues of the equipment offered. A scanned copy of Bid Security as mentioned in Clause 10.0 should be submitted with the Techno-commercial Bid in c-folder.

- 13.0 Rates/Prices must be quoted / maintained in the “online price Bid Format” only. OIL will consider the rates/prices quoted in the “online price Bid Format” only.

- 14.0 Timely submission of online bids is the responsibility of the Bidders. The Bid along with all annexures and copies of documents should be submitted in e-form only through OIL’s e-bidding engine. The Bid submitted in physical form against e-procurement tenders shall not be given any cognizance. However, the following documents should necessarily be submitted in physical form in sealed envelope. The Tender No. and the Date of Bid Closing/Opening must be prominently marked on the outer cover/envelope containing these documents and should be sent to Chief Manager (M & C), Oil India Limited, 2A, District Shopping Centre, Saraswati Nagar, Basni, Jodhpur - 342005 India so as to reach before the scheduled Bid Closing Date and Time of the Tender.

- (i) The Original Bid Security
- (ii) Power of attorney for signing the bid document.
- (iii) Other documents required to be submitted in original as per tender requirement, if any.

- 15.0 **Integrity Pact:**

OIL shall be entering into an Integrity Pact with the Bidders as per format enclosed vide Section-X to the Tender Document. This Integrity Pact proforma has been duly signed digitally by OIL’s competent signatory. The proforma has to be returned by the Bidder (along with their Technical Bid) duly signed digitally by the same signatory who signed the bid i.e., who is authorized to sign the bid. Uploading the Integrity Pact with digital signature will be construed acceptance of all terms & conditions mentioned therein and that all pages of the Integrity Pact have been signed by the bidder’s authorized signatory who signs the Bid.

- 15.1 OIL has appointed Shri R.Mathur, IPS (Retd) & Shri Satyananda Mishra, IAS(Retd.) as Independent Monitors (IEMs) to oversee implementation of the Integrity Pact in OIL. Bidders may contact the Independent Monitors for any matter related to this Invitation for Bid (IFB) at the following addresses:

- 1.0 SHRI RAJIV MATHUR, IPS(Retd.),
e-Mail ID : rajivmathur23@gmail.com
- 2.0 SHRI SATYANANDA MISHRA, IAS(Retd.)
e-Mail ID : satyanandamishra@hotmail.com
- 3.0 . SHRI JAGMOHAN GARG, Ex-Vigilance Commissioner, CVC
e-Mail id : jagmohan.garg@gmail.com

16.0 DEADLINE FOR SUBMISSION OF BIDS :

- 16.1 Bids should be submitted online as per the online tender submission deadline. Bidders will not be permitted by System to make any changes in their bid/quote after the bid submission deadline is reached. Bidders are requested to take note of this and arrange to submit their bids within the submission deadline to avoid last minute rush/network problems.
- 16.2 No bid can be submitted after the submission dead line is reached. The system time displayed on the e-procurement web page shall decide the submission dead line.
- 16.3 The documents in physical form must be received by Company at the address specified in the "Forwarding Letter". Timely delivery of the same at the address mentioned in the Forwarding Letter is the responsibility of the Bidders.

17.0 EXTENSION OF BID SUBMISSION DATE/TIME:

- 17.1 Normally no request for extension of Bid Closing date & Time will be entertained by Company. However, in case of any change in the specifications, non-receipt of any offer, inadequate response or for any other reasons, Company may at its discretion or otherwise, extend the Bid Closing Date and/or Time.
- 17.2 In the event of receipt of Single Offer within Bid Closing date & Time, OIL reserves the right to extend Bid Closing Date and/or Time as deemed fit. During extension period bidders who have already submitted the bids on or before original Bid Closing date & Time shall not be permitted to revise their bid.

18.0 FORMAT OF BID SUBMISSION:

- 18.1 Bids to be submitted online at OIL's E-PORTAL. Detailed instructions are available in "HELP DOCUMENTATION" in the E-PORTAL. Guidelines for bid submission are also provided in this tender document.
- 18.2 The Bid Security (Scanned Copy) mentioned in para 10.0 above should be uploaded with the Technical Bid.
- 18.3 The terms and conditions of the contract to be entered with the successful bidder are given in various Sections of this bid document.

19.0 LATE BIDS:

Bidders are advised in their own interest to ensure that the bids are uploaded in the system well before the closing date and time of the bid. Company will not be responsible for any failure to upload the Bids due to last minute rush.

20.0 MODIFICATION AND WITHDRAWAL OF BIDS :

- 20.1 The Bidder after submission of Bid may modify or withdraw its Bid prior to Bid Closing Date & Time.
- 20.2 No Bid can be modified or withdrawn subsequent to the deadline for submission of Bids.

- 20.3 No Bid can be withdrawn in the interval between the deadline for submission of Bids and the expiry of the period of Bid Validity specified by the Bidder on the Bid Form. Withdrawal of a Bid during this interval shall result in the Bidder's forfeiture of its Bid Security and bidder shall also be debarred from participation in future tenders of OIL.

21.0 BID OPENING AND EVALUATION

- 21.1 Company will open the Bids, including submission(s) made pursuant to para 22.0, in the presence of Bidder's representatives who choose to attend at the date, time and place mentioned in the Forwarding Letter. However, the Bidder's representative must produce an authorized letter from the bidder at the time of opening of tenders. Unless this Letter is presented, the representative will not be allowed to attend the opening of tenders. The Bidders' representatives who are allowed to attend the bid opening shall sign in a register evidencing their attendance. Only one representative against each bid will be allowed to attend.
- 21.2 Bid (if any) for which an acceptable notice of withdrawal has been received pursuant to para 18.2 shall not be opened. On opening the remaining bids Company will examine them to determine whether the same are complete, requisite Bid Securities have been furnished, documents have been properly signed and the bids are generally in order.
- 21.3 At bid opening, Company will announce the Bidders' names, written notifications of bid modifications or withdrawal, if any, furnishing of requisite Bid Security, rates/costs quoted and such other details as the Company may consider appropriate.
- 21.4 Company shall prepare, for its own records, minutes of bid opening including the information disclosed to those present in accordance with above sub-clauses.
- 21.5 To facilitate examination, evaluation and comparison of bids the Company may, at its discretion, ask the Bidder for clarifications of its bid. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.
- 21.6 Prior to detailed evaluation, the Company will determine the substantial responsiveness of each bid to the Bidding Document. For this purpose, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Document without material deviations or reservation. A materials deviation or reservation is one which effects in any substantial way the scope, quality or performance of work, or which limits in any substantial way, in consistent way with the bidding document, the Company's right or the bidder's obligations under the contract, and the rectification of which deviation or reservation would affect unfairly the competitive position of other bidders presenting substantial responsive bids. The Company's determination of bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidences.
- 21.7 A Bid determined as not substantially responsive will be rejected by the Company and can not subsequently be made responsive by the Bidder through correction of the non-conformity.
- 21.8 The Company may waive minor informality or nonconformity or irregularity on a bid that does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

21.9 The Company will examine the Bids to determine whether they are complete, any computational errors have been made, required sureties have been furnished, the documents have been properly signed, and the bids are generally in order.

21.10 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price (that is obtained by multiplying the unit price and quantity) the unit price shall prevail and the total price shall be corrected accordingly. If any Bidder does not accept the correction of the errors, his bid will be rejected. If there is a discrepancy between words, and figures, the amount in words will prevail.

21.11 EVALUATION AND COMPARISON OF BIDS :

The Company will evaluate and compare the commercial bids as per Bid Evaluation Criteria (Section- V) of the tender document to establish inter-se-ranking of bidders.

22.0 CONTACTING THE COMPANY :

22.1 Except as otherwise provided in para 18.0 & 19.0 above, no Bidder shall contact Company on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded.

22.2 An effort by a Bidder to influence the Company officials in bid evaluation, bid comparison or Contract award decisions, may result in rejection of their bid.

D. AWARD OF CONTRACT

23.0 AWARD CRITERIA:

The Company will award the Contract to the Contractor whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

24.0 COMPANY'S RIGHT TO ACCEPT OR REJECT ANY BID:

Company reserves the right to accept any bid and to reject any or all bids and/or to annul the bidding process in entirety, at any time prior to award of contract, without thereby incurring any liability to the affected bidders or any obligation to inform the participating bidders of the ground for Company's action.

25.0 NOTIFICATION OF AWARD:

25.1 Prior to the expiry of the period of bid validity or extended validity, the Company will notify the successful Bidder in writing by registered letter or by fax (to be confirmed in writing by registered / courier letter) that his bid has been accepted.

25.2 The notification of award will constitute formation of the Contract.

25.3 Upon the successful Bidder's furnishing of Performance Security pursuant to Clause 31.0 herein below, the Company will promptly discharge the Bid Securities of all unsuccessful Bidders, pursuant to Clause 10.0 hereinabove.

26.0 PERFORMANCE SECURITY:

26.1 Within two(02) weeks of receipt of notification of award from the Company, the successful Bidder shall furnish the performance security for an amount (10% of annualized contract value) specified in the Forwarding Letter in the performance Security Form as provided in the Bidding Document (Ref. Section – VIII) and must be in the form of Bank Guarantee (BG) from any of the following Banks:

- i) Any Nationalised / Scheduled Bank in India OR
- ii) Any Indian branch of a Foreign Bank OR

iii) Any reputed foreign Bank having correspondent Bank in India

The performance security shall be payable to Company as compensation for any loss resulting from Contractor's failure to fulfill its obligations under the Contract.

- 26.2 The performance security specified above must be valid for three(03) months beyond the expiry date of the contract to cover the warranty period and to allow Company to lodge claim, if any. The same will be discharged by Company not later than 30 days following its expiry. In the event of extension of contract, subsequent to expiry of validity of the original contract period, Contractor shall have to enhance the value of the performance security to cover 10% of the contract value for the extended period and also to extend the validity of the performance security accordingly.
- 26.3 Failure of the successful bidder to comply with the requirements of para 26.1 or 26.2 above shall constitute sufficient grounds for annulment of the award and forfeiture of the Bid Security.

INVOCATION OF PERFORMANCE BANK GUARANTEE

- 26.4 In the event of Contractor failing to honour any of the commitments entered into under the contract and/or in respect of any amount due from Contractor to Company, Company shall have an unconditional option under the guarantee to invoke the Performance Bank Guarantee and claim the amount from Bank.
- 26.5 Company will have the right to invoke the Performance Bank Guarantee in case the Contractor fails to mobilize the Equipment, tools and personnel etc. within the stipulated period irrespective of any reasons whatsoever.

27.0 SIGNING OF CONTRACT:

- 27.1 At the same time as the Company notifies the successful Bidder that its Bid has been accepted, the Company will either call the successful Bidder for signing of the agreement or send the Contract Form provided in the Bid Documents, alongwith the General & Special Conditions of Contract, Technical Specifications, Schedule of Rates incorporating all the agreements between the parties.
- 27.2 Within 15 days of receipt of the final contract document, the successful Bidder shall sign and date the contract and return the same to the Company.

****** END ******

SECTION-I

TERMS OF REFERENCE / SCOPE OF WORK / TECHNICAL SPECIFICATIONS

1.0 INTRODUCTION:

OIL INDIA LIMITED (OIL), a premier National Oil Company, is engaged in the business of exploration, production and transportation of crude oil and natural gas for over five decades. It is a Navratna Company under Ministry of Petroleum and Natural Gas, Government of India and the second largest National Oil Company in the country.

Rajasthan Project, one of the projects of OIL, is engaged in exploration and production of Natural Gas from Jaisalmer Basin and exploration of Heavy oil in Bikaner-Nagaur basin within Jodhpur Sandstone of Infracambrian age of Western Rajasthan in India. OIL intends to exploit heavy oil from Baghewala structures with state of the art technology.

DEFINITIONS:

COMPANY	Oil India Limited
CONTRACTOR	Organization that supplies the equipment and provides the service according to the Functional Specification.
COUNTRY OF OPERATION	Means, India.
OPERATING AREA	Means the onshore area defined as Baghewala.
FUNCTIONAL SPECIFICATION	Features, characteristics, process conditions, boundaries and exclusions defining the performance of a product or service, including the quality assurance requirements.
SCOPE	State scope of document as intention, i.e. what the document intended to achieve.
SHALL/WILL	Is used to indicate requirements that MUST be satisfied in order to comply with the Scope of Work.
SHOULD	Is used to indicate requirements that are preferred. CONSULTANT propose alternatives shall clearly identify as such and shall be supported with objective evidence.
MAY	Is used to indicate that a provision is OPTIONAL.
IBR	Indian Boiler Regulations-1950 with latest amendments

2.0 OPERATING AREA:

2.1 GEOGRAPHIC LOCATION:

Baghewala, the area of operation, is located at the western part of the country India and in the States of Rajasthan. Rajasthan encompasses most of the area of Great Indian Desert (Thar Desert), which has an edge paralleling the Sutlej-Indus river valley along its border with Pakistan. The region borders Pakistan to the west, Gujarat to the southwest, Madhya Pradesh to the southeast, Uttar Pradesh and Haryana to the northeast and Punjab to the north.

The nearest airport to the operating area is Jodhpur Airport and is located at a distance of around 350 km. The nearest railway station is Phalodi.

2.2 ENVIRONMENTAL CONDITIONS:

Components	International System (SI)
Ambient Temperature (Max. / Min.)	55 / -1 Deg C
Humidity (Max.)	40%
Average Rainfall	25 mm/year
Wind velocity(Max.)	128 KM/Hr
Frequency of Sand storm	March to September and occasional during the remaining period.
Seismic	Zone III, Moderate
Weather	Four distinct seasons - Pre monsoon, monsoon, post-monsoon and Winter
Topography of Site	Part of Thar Desert

3.0 HYDROCARBON PROSPECT:

3.1 WELL EVIDENCE:

A total of 6 (Six) wells have been drilled in the Baghewala ML area. The outcome of Drilling of these wells are outlined as under:

The presence of heavy oil in Baghewala structure has been established during 1991 through drilling of the first exploratory well BGW-1 in the structure. The well BGW-1, drilled down to the basement (TD – 1375 m), encountered heavy oil (17 – 19 Deg API) in the deeper Infracambrian formations viz., Jodhpur and Bilara.

The well BGW-2 was drilled at the same plinth of BGW-1 in order to test the Upper Carbonate. The well BGW-2, drilled down to 675m within the Upper Carbonate formation, conventional production testing of the Upper Carbonate through perforations showed water only.

To assess the northward extent of heavy oil within Jodhpur Sandstone, BGW-3 was drilled at distance of about 1.3 km NW of well BGW-1 as an appraisal well. Well BGW-3 was drilled down to a final depth of 1350 m within Malani Volcanics. Initial production testing was carried out in this well in Jodhpur sandstone. On testing, through DST, the well showed inflow of only formation water with traces of asphaltic materials.

The fourth well, BGW-4, is located at a distance of about 2.4 km towards ENE from well BGW-1. This well was drilled as the second appraisal well of Baghewala structure and drilled down to 1152 m within Malani Volcanics. On conventional production testing of 1090 m Jodhpur Sand, the presence of high viscous heavy oil was established.

The well BGW-5 is located at a distance of about 2.6 km towards WSW from BGW-1. This is the third

appraisal well drilled in Baghewala structure. The well was drilled down to a depth of 1252m within Malani Volcanics. On conventional production testing of 1181 m Jodhpur Sand, the presence of high viscous heavy oil was established.

The well BGW-6 was drilled as Pilot well for recovery of Bitumen from Upper Carbonate Formation using Steam Injection technology on experimental basis. The well was drilled down to a final depth of 857m and completed for cyclic steam injection. However, during injection of steam attempted twice in 2006 and 2007, operational problem related to elongation of casing with well head and leakage of steam were encountered and the project had to be suspended.

Two wells Punam-1 and Tavriwala-2 was drilled in two different structures (East of Baghewala Structure) in 2012 and encountered heavy oil in Jodhpur formation. The well Punam-1 was drilled in NELP area, is located around 15 km towards NE from BGW-1 and major part of the structure falls in Baghewala PML area. Tavriwala-2 was drilled in Tavriwala structure located around 10 km towardwest from BGW-1.

Two more wells Panna-1 & Bikampur-1 were drilled but during production testing no trace of oil found. However, OIL is planning to carry out production testing by perforating in upper zones.

3.2 PRODUCTION EFFORT:

Experimental Production Testing of BGW-1 and BGW-4 was carried out in the year 1995 with Progressive Cavity Pump (PCP) and Bottom Hole Heater Completion and achieved a maximum production rate of 3-4 KLPD (18-25 BOPD).

In the year 2009-10, another Experimental Cold Production of Heavy Oil was carried out with Chemical Stimulation and Sucker Rod Pump Artificial lift assistance in BGW-1 and BGW-4. An intermittent production rate of 4.5-5.5 KLPD (25-30 BOPD) was achieved.

In the year 2012, production testing was carried out in Punam-1 with Chemical Stimulation and Sucker Rod Pump Artificial lift assistance and an intermittent production rate of 1.4 KLPD (7.7 BOPD) was achieved.

In the year 2016-17, by applying steam through hired Mobile Steam Generator production rate upto 25 KLPD was achieved from BGW-1 & BGW-4. Now, BGW-1 & BGW-4 is in production and the crude is stored in the storage tanks at the well site without any process involvement. Presently, OIL is dispatching the crude of BGW to ONGC, Mehsana through bowser for onward dispatching to IOCL Koyali Refinery.

Now, OIL is going to drill one horizontal well and one vertical well with thermal completion in the Baghewala PML area and will produce the high viscous oil through Cyclic Steam Stimulation (CSS) method. For production of crude from these new wells, OIL will use its existing setup lying at pilot well BGW-6. The setup is not in operation since 2006 and revival is required to be carried out.

4.0 DEFINITION OF WORK:

The contractor shall carry out perform the work under the contract in two parts:

- a) PART-A: i) Relocation of Water treatment plant to the new location from Baghewala well 6 after revival & Revival of the Production Surface setup at Baghewala well 6.
 - ii) Supply, erection, testing & commissioning of four pole structure
 - iii) Supply, erection, testing commissioning of copper wound transformers & other electrical jobs
- b) PART-B: Operation & Maintenance of OIL's setup for 2 (two) years.

5.0 PRODUCTION FACILITIES AND INFRASTRUCTURE FOR PART-A OF THE CONTRACT:

A. The production facilities and infrastructure of Production Surface Setup required for services as under:

- 5.1 Crude, Water, Steam, Steam Condensate & Gas Flow line network;
- 5.2 Gas/Oil Separator;
- 5.3 Knockout Drum;
- 5.4 H₂S Scavenging & Antifoam tanks & motor driven pumps;
- 5.5 Air Distribution Network;
- 5.6 Flare Ignition system;
- 5.7 Fire water storage, pumping system, Fire Hydrant & Fire Water Network;
- 5.8 Crude Oil Storage Tanks & Bowser Loading pumps;
- 5.9 Electrical Illumination;
- 5.10 Electrical Distribution, UPSs & MCC Panel;
- 5.11 Complete Plant Control & Instrumentation systems including local panels, field instruments, Electronic PID controllers, Process connection & pipping, instrumentation cables, junction boxes etc;.
- 5.12 DG Sets
- 5.13 Any other production facilities of Surface Set-up.

B. Relocation, Revival and bringing to operation of water treatment plant includes the following units:

1. Water pumps with motor - 4 nos
2. Water treatment Plant- 2 nos
3. Alkali Dosing Pump- 4 nos
4. Water tanks- 1no
5. Fuel (oil) tanks- 2 nos (optional)

Note: The entire Production line is suitably jacketed with steam at 10.54 kg/cm² and 185 deg C to maintain the temperature of the fluid ranging from 80 to 85 deg C.

C. Electrical Jobs:

- i) Supply, erection, testing & commissioning of four pole structure
- ii) Supply, erection, testing commissioning of copper wound transformers- 3 nos & other electrical jobs as detailed below

6.0 DETAILED SCOPE OF WORK FOR PART-A OF THE CONTRACT:

The Contractor shall carry out the jobs in two stages:

A) PART-A: REVIVAL OF THE PRODUCTION SURFACE SETUP.

i) STAGE-I:

Complete checking & maintenance of the plant & identify the materials, if any required to be replaced. The contractor is required to provide the health check-up & maintenance report of the plant and list of materials to OIL, if any required to replace. The decision of replacing the materials lies with OIL. The decision of replacing the materials lies with OIL (as detailed below).

6.1 Mechanical Maintenance:

- a) The contractor has to carry out the checking like leak testing, repair of the complete Flow Line Network (steam, water, crude oil, gas, chemical) inside the plant.
- b) The contractor has to re-insulate the steam flow line wherever required.
- c) The contractor has to carry out overhauling of all the rotating equipment of the Surface Setup and make it operational.

- d) Overhauling & repairing of all the Hand Operated Valves, Non-Return Valves, Stem Traps etc. Greasing shall be carried out.
- e) Checking, repairing & pressure testing of all the Pressure Safety Relief Valves.
- f) Handling, placing & re-commissioning of the Crude Oil Storage Tank (8 nos.) Bowser Loading pump (2 nos.), Chemical Dosing pump & Dosing mixing tanks (8 nos.), Fire Pump Diesel Tank etc. shall be carried out.
- g) Any other jobs as per revival requirement.
- h) Installation of materials as required within the surface set-up for revival.

6.2 Electrical Maintenance:

- a) Maintenance of various AC motors and their switchgears deployed at the surface set up.
- b) Maintenance of MCC panels, AUX panels, various distribution boards, lighting transformers, UPSs of the surface set up and street lighting system etc. of the entire plant.
- c) Checking of Earth Resistance of the entire plant and maintenance as required.
- d) Checking & repairing of electrification of buildings like control room, electrical sub-station within the surface set-up.
- e) Any other jobs as per revival requirement.
- f) Installation of materials as required within the surface set-up for revival.

6.3 Instrumentation Maintenance:

- a) Checking, cleaning & calibration of all type of Electronic Field instruments like Pressure Transmitters, DP Transmitters, Temperature transmitters, I/P Converters etc.
- b) Checking, Cleaning & Calibration of Pressure Gauges, Level Gauges;
- c) Checking & Cleaning of all instrumentation impulse lines, servo air distribution lines, Orifice Plates.
- d) Checking & Calibration of Control Valves, Air Filter Regulators.
- e) Checking, Cleaning & Repair of Junction Boxes.
- f) Checking, Cleaning of the Cable Trays. Installation of New Trays as required.
- g) Checking of all the instrumentation cables & replacement as required.
- h) Checking & Cleaning of all Instrumentation Panels and Panel equipments;
- i) Checking & Calibration of electronic PID Controllers, recorders etc..
- j) The contractor will carry out the maintenance of the field & control room instruments as per OEM manuals.
- k) Any other jobs as per revival requirement.
- l) Installation of materials as required within the surface set-up for revival.

Note: The contractor should have its own tube cutter, tube bender, threading, Calibration equipment like Pressure Calibrator/Dead Weight Tester, Multimeter, HART Communicator, Megger etc. required to complete the jobs.

6.4 NDT (Non Destructive Testing):

Followings activities shall be carried out:

- a) Visual Examination and thorough inspection of the set-up.
- b) Ultrasonic Thickness Gauging
- c) The contractor shall carry out complete hydraulic testing of the set-up during execution of Stage-I of PART-A of the contract. During Stage-II of the PART-A, if hydraulic testing is required to carry out due to installation of any new part then the contractor shall carry out the testing. After successful hydraulic testing of the vessels, the testing details shall be updated in the vessels body by painting.

d) Radiographic weld inspection for the welded joints.

6.5 Relocation & Revival: The Contractor has to arrange to shift the water treatment plant along with its ancillaries (alkali dosing pumps) to the new location. The job will include disconnecting the water treatment plant at BGW#6, prepare site preparation at new location, make necessary foundation for each unit of the water treatment plant as per present layout in BGW#6 (P&ID Diagram to be provided). Foundation drawing will be provided. For this entire job, bidder has to visit site and access the layout of the boiler set up with the water treatment plant. Bidder also has to ensure that distances between units are maintained so that fabrication job is avoided.

Bidder has to quote for shifting the two overhead tanks which provides feed water to boilers for which bidder has to disconnect all connections at BGW#6 and prepare the site at new location and make necessary foundation for the same.

The same has to be done for the fuel tanks and pumping system and its accessories.

The bidder should do the necessary surface preparation at new location before making foundations. It may be noted that at present there is only sand at the surface as it is a part of the great Thar desert.

All these items after shifting has to be connected as before (BGW#6) to the boiler and the bidder has to ensure that there is no leakage in the lines/flanges etc. Pressure test of the lines has to be carried out by the bidder for water lines and fuel lines.

For all these jobs for resiting/ shifting bidder has to arrange all infrastructure required on their own including water for civil jobs. The foundation jobs will be as per the foundation drawing. Bidder while visiting site before quoting may physically check the existing set up and draw their own inference. Bidder has to keep into consideration that the same layout is maintained in the new location which at present exist in the present site at BGW#6. Bidder should take utmost care in transportation and while disconnecting the equipments as health check up and necessary maintenance has already been done in all the equipments/plant. Bidder will be solely responsible for safe transportation of the equipment without any damage. Any damage to equipment, bidder will be held responsible and it is the sole responsibility of the bidder to rectify or replace the items. To avoid any confusion Oil representative along with bidder's personal will inspect the item before and after transportation.

ii) **STAGE-II:**

Procurement of the materials, if any for revival as per OIL instructions, Installation of the materials, revival of the plant as per revival plan upto the satisfaction of OIL. On issue of LOA, bidder has to mobilize their manpower and carry out health check up of all equipments, instruments, electrical fitting and make a comprehensive list of materials that needs to be replaced within 45 days. During this time, OIL will depute its personal (Production, Instrumentation, Electrical) who will be involved in the health check up process. The final list of equipment for procurement has to be vetted by concern personal of OIL from respective stream. The item procurement process and material availability at site should be within 45 days from obtaining concurrence from OIL.

Note:

- a) The contractor personnel shall be ready to provide helping hand to OIL personnel in any revival job carried out by OIL authority inside the plant.
- b) The contractor personnel shall use proper tools & tackles to carry out the maintenance jobs. The contractor shall supply all the tools & tackles to his personnel.
- c) The contractor shall provide proper PPE (helmet, hand gloves, safety shoe, goggles, cotton overall, ear plug etc.) to all his engaged field personnel under the contract. The personnel will not be allowed to work without proper PPEs.
- d) Any other jobs not spelled out above but required for revival of the Surface Setup shall be carried

out by the contractor.

- e) The contractor has to provide detailed report on the status of the jobs carried out to OIL authority on daily basis.
- f) The contractor shall take all statutory registration and approval required from IBR for maintenance activities and operation thereafter on behalf of company as required for pressure parts under IBR. The Contractor has to take endorsement from the Company on all the documents as required for necessary IBR approval. The cost incurred for IBR approval will be paid by Company at actual on submission of bill/receipt after acceptance only. All type of tests required for IBR approval will be carried out by the Contractor at its own cost.
- g) The site jobs under STAGE-I & STAGE-II shall be completed by the Contractor upto OIL satisfaction within 120 days of official intimation of mobilization, failing which LD will be imposed.
- h) Painting of all pipes & fittings, fuel tanks, water tanks, pumps etc at new location has to be done by the bidder as per prescribed standard.
- i) Bidder has to make minimum 15 display boards depicting the starting procedure, dos and don'ts etc. to be displayed in the new location for boilers. (Matter to be provided by OIL)
- j) Bidder has to provide a fencing around the boiler area so that animals cannot enter the area. The fencing has to be of barbed wire. Approx area 60x45 sq m, height of the fencing should be 6.0 feet from the ground level.

6.6 Electrical Jobs:

- A. Supply, erection, testing & commissioning of four pole structure comprising of the following items per structure: - **Three (03) nos.**
 - a) 11 KV 400 AMPS, 3 Pole central pot rotating double break type isolator as per IS: 9921 Part I –V with GI spring loaded reverse loop type fixed contact, solid hard drawn electrolytic copper tubular moving contact with silver/nickel plated at end points, 9 nos. post insulator of 12KV (IS:2554 and IS:5350 part III), hot dip galvanized hard wire, nut bolts etc. complete in all respect as per DISCOM specification, type tested by CPRI/ERDA. The isolator shall be manually operated and shall have arrangement for padlocking.
 - b) 100A, 11 KV DO Fuse Unit as per IS:9385 on existing structure with six nos. 24/22KV post insulator (IS:5350 Part –III), hot dip galvanized hard wire, nut bolts etc. complete in all respect as per DISCOM specification, type tested by CPRI/ERDA.
 - c) 3 Nos of 11 KV, 10 KA (IS:3070) distribution type lightning arrester (LA) with mounting accessories to be installed on the structure, type tested by CPRI/ERDA.
 - d) The three 3 LAs with mounting accessories including GI earthing strips & separate earth electrodes (02 nos.).
 - e) The supporting four pole structures and related accessories shall be under scope of the supplier/service provider. All the four poles shall be grouted properly.
 - f) Fabricated steel structures shall be painted with aluminium paint.
 - g) Hooking up of power supply from DISCOM pole to this four pole structure with suitable ACSR conductor and 11KV Disc Insulator (2nos per phase)
 - h) Required nos. of stay wires with related accessories.
 - i) Earthing to be done from four nos. of earth pits as per IS: 3043. (2 for structure earthing & 2 separately for LA)

Note:

- 1) Any item not mentioned above but required proper installation and commissioning shall also be under the scope of the supplier.
- 2) CT- PT and HT meter shall be supplied by DISCOM. These items with suitable rain protected box shall have to be provided and installed by the supplier of 4 pole structure as per DISCOM specifications.

B. Supply, erection, testing commissioning of copper wound transformer conforming to IS: 2026 (with latest amendments) losses as per DISCOM CTL(CTL test certificate to be attached) of rating 500KVA, 11/0.433KV Delta – Star connected, vector group Dyn-11, standard accessories like conservator, silica gel breather, radiator, fins, HT terminal box comprising of HT studs / bar & supporting bushing, LT cable box with bar & supporting insulators, OFF – LTC (+/- 5% in steps of 2.5%) winding temperature rise of 50/55 deg. C, ISI marked drain valve, Dial type temperature gauge, transformer oil filled, epoxy based paint, including carrying of pre commissioning testing and charging of transformer- **One (01)No**

This transformer shall be energised from the four pole structure as per DISCOM specification by connecting with suitable ACSR conductor. The LV side terminal box of the transformer shall have suitable enclosure & shall be IP 65 protected.

Foundation with fencing for the transformer shall also be under the scope of the supplier.

Earthing to be done from four nos. of earth pits as per IS: 3043 (2 nos. for Transformer neutral – through NGR, 2 nos. for body earth)

All earthing shall be carried out as per IS 3043 and CEA regulation 2010 with latest amendments.

Permission from Electrical Inspector (for energizing the O/H line & loading the transformer) shall also be under the scope of the supplier.

Make: Crompton Greaves/ABB/Siemens/Bharat Bijlee/NGEF

Note:

1)Any item not mentioned above but required proper connection, installation and commissioning shall also be under the scope of the supplier.

2) Transformer must be suitable for connecting **NGR**.

C. Supply, erection, testing commissioning of copper wound transformer conforming to IS: 2026 (with latest amendments) losses as per DISCOM CTL(CTL test certificate to be attached) of rating 250 KVA, 11/0.433KV Delta – Star connected, vector group Dyn-11, standard accessories like conservator, silica gel breather, radiator, fins, HT terminal box comprising of HT studs / bar & supporting bushing, LT cable box with bar & supporting insulators, OFF – LTC (+/- 5% in steps of 2.5%) winding temperature rise of 50/55 deg. C, ISI marked drain valve, Dial type temperature gauge, transformer oil filled, epoxy based paint, including carrying of pre commissioning testing and charging of transformer.- **Two(02)Nos**

This transformer shall be energised from the four pole structure as per DISCOM specification by connecting with suitable ACSR conductor. The LV side terminal box of the transformer shall have suitable enclosure & shall be IP 65 protected.

Foundation with fencing for the transformer shall also be under the scope of the supplier.

Earthing to be done from four nos. of earth pits as per IS: 3043 (2 for Transformer neutral – through NGR, 2 for body earth)

All earthing shall be carried out as per IS 3043 and CEA regulation 2010 with latest amendments.

Permission from Electrical Inspector (for energizing the O/H line & loading the transformer) shall also be under the scope of the supplier.

Make: Crompton Greaves/ABB/Siemens/Bharat Bijlee/NGEF

Note:

1) Any item not mentioned above but required proper connection, installation and commissioning shall also be under the scope of the supplier.

2) Transformer must be suitable for connecting NGR.

D. NGR (Neutral grounding resistor): *Three (03) Nos*

NGRs are used in industrial Power Systems for resistance grounding of star connected generators and transformers. NGR is connected between ground and neutral of transformers, generators, bus bars and grounding transformers. NGR limits the fault current to value enough to operate protective relays, thereby preventing unwanted damage to the system.

CONSTRUCTION

The NGR unit shall consist of two parts:

- 1) the resistor grid enclosed in a metallic enclosure, and
- 2) the NGR monitoring system, enclosed in a separate panel.

1) *Resistor and resistor enclosure*

a) Resistor assembly

The resistive element/grid material shall be low temperature coefficient, resistor grade stainless steel, resistor grade 1JR (or Cu-Ni, Ni-Cr or FeCrAl) of sufficient mass to withstand the rated current and prescribed duty.

The resistive element/ resistor grid shall be made of unbreakable, corrosion proof joint less elements wire wound around a ceramic (or micanite) core supported on a through-rod.

The resistors shall be mounted in heavy gauge corrosion resistant support frames, using stainless-steel hardware. The entire resistor assembly shall be mounted and supported on glazed insulators rated for the system voltage. All resistor terminals and interconnections between resistor units shall be stainless-steel using stainless steel hardware including lock washers. High current connections shall be spot or TIG welded as appropriate. Connections between resistors and bushings shall be solid copper or stainless steel bars. The unit shall be designed to permit the expansion of supporting rods when submitted to high operating temperatures.

With lower quality resistance material (high temperature coefficient), the change in resistance value will be excessive. This may result in insufficient fault current to actuate the earth fault detection relay and the fault will stay on the system and eventually destroy the resistor and whatever distribution equipment it is protecting.

Resistor grid assembly mounting structure shall be properly supported to absorb vibration and stress during faults and transit.

Neutral cable shall be brought to one terminal of the NGR unit. The other end of the NGR unit shall be suitable for connection to ground through 2 (Two) earth electrodes. These end connections of the resistor unit will be brought out to terminal box or through top or side mounted high voltage bushings.

Stand-off / support insulators shall be ceramic or epoxy resin cast.

The resistor grid shall be suitable for

Rated Voltage : 415 Volts, 3 ph.

Rated Current : 750 mA

Time Rating : 30 Sec.

Temperature Rise : 375 Deg. C.

Location : Indoor

Tolerance : + / - 10 %

Degree of Protection : IP 33

Applicable Standard : IEEE 32: 1972

b) Resistor enclosure panel

Resistor grid assembly shall be housed in an enclosure made of heavy gauge sheet steel (= 2mm), self-supporting and floor mounted, cubicle type, indoor, dust and vermin protected. Enclosure shall be supported on steel support channels, suitable for fixing with grouting bolts. Sheet steel shall be used on a rigid framework of suitably sized steel angles and channels, welded or bolted together with stainless-steel hardware. Front of the panel shall be hinged on the left side to serve as an inspection and service door, fitted with clamps and special non-deteriorating neoprene gaskets. Enclosure shall be provided with bolt-on louvered covers (fitted with fine wire mesh inside) on sides for circulation of air. The top of the enclosure shall be embossed with stiffening ribs. Lifting lugs shall be provided on the top of panels. Bottom shall be elevated to 6 to 8 inches above the base of the unit. Bottom shall be screened for maximum cooling of resistors. Suitable earthing studs are to be provided on two sides of the panel body.

Protection rating of the enclosure shall be IP 42, using roof shaped louvers shielded with wire mesh (inside). A durable corrosion resistant nameplate permanently attached to one side cover shall show the manufacturer and the complete rating. Clear warning labels (danger, high voltage, earthing etc.) shall also be fixed at appropriate places.

Enclosures shall be Seven-Tank treated, suitably cleaned, primed and powder coated/ spray painted, colour of paint light gray to shade 631 as per IS: 5.

One strip type panel heater shall be installed in the resistor panel. The heater shall be provided with an adjustable setting thermostat.

Dimensions (L X B X H), minimum = 600 mm x 500mm x 600 mm

2) NGR monitoring system

NGR MONITORING CONSIDERATIONS

Ground-fault protection, coordination, and annunciation systems depend on the integrity of the NGR. If the NGR fails, these systems become inoperative. In addition, an open NGR causes the system to become ungrounded and exposure to transient over voltages is possible.

Monitoring of the NGR shall include the following considerations:

- 1) Monitoring the NGR connections to the neutral and to the ground bus- for continuity
- 2) Monitoring the neutral/NGR current through a residual current CT provided in the NGR path
- 3) Monitoring the neutral-to-ground voltage
- 4) Audio- visual annunciation of ground fault and NGR fault

The NGR monitor shall measure changes in NGR resistance, current in the neutral and neutral-to-ground voltage. The NGR monitor shall coordinate these three measurements and operate output contacts when an NGR fault or a ground fault is detected. NGR monitor shall respond to fundamental-frequency current and voltage, and it is not influenced by harmonics.

The output contacts shall be used to operate alarms (buzzer) and visual annunciation devices. Potential free output contacts (minimum 02 pairs) shall also be provided for future use, such as tripping of main breakers etc.

Main components of the NGR monitoring system shall include, but not limited to, the following:

- a) Monitor for Ground Fault & NGR (with band pass filter for frequencies other than 50 Hz)
- b) Coupling device/sensing resistor for NGR Monitor
- c) Residual current sensing C. T. for NGR Monitor
- d) Output relay with sufficient nos. of potential free NO and NC contacts
- e) Alarm indicator & operator panel with visual annunciation for NGR fault and ground fault and buzzer
- f) Incoming 230/240 V, 50 Hz AC supply with sufficiently rated HRC fuse for power supply to monitor panel

NGR monitoring system shall be housed in an enclosure made of heavy gauge sheet steel (= 2mm), self-supporting, cubicle type, indoor, dust and vermin protected. The enclosure shall be supported on steel support angles/channels, suitable for fixing (with nuts and bolts) on top of the NGR housing panel. At least 6 (six) inches gap shall be maintained between the top of the NGR housing and bottom plate of the

NGR monitoring system panel, for maintaining air flow. Sheet steel shall be used on a rigid framework of suitably sized steel angles and channels, welded or bolted together with stainless-steel hardware. Front of the monitoring panel shall be hinged on the left side for easy access to the components inside and fitted with clamps and special non-deteriorating neoprene gaskets. The top of the enclosure shall be slightly overhung and sloped. It shall be embossed with stiffening ribs. Lifting lugs shall be provided on the top of panels.

Suitable earthing studs are to be provided on two sides.

Protection rating of the enclosure shall be minimum IP 53. A durable corrosion resistant nameplate permanently attached to one side cover shall show the manufacturer and the complete rating. Clear warning labels (danger, high voltage, earthing etc.) shall also be fixed at appropriate places.

Enclosure shall be suitably cleaned, primed and powder coated/ spray painted, colour of paint light gray to shade 631 as per IS: 5.

The buzzer and indication lights/test/reset buttons shall be mounted on the front door. Suitable engraved, corrosion resistant legends shall be used for each component/function. Monitor windows for remote indicator alarm and operator panel will also be mounted on the door.

As the components of NGR monitoring system shall be wired up to the NGR, steel rigid conduits shall be used to run the signal cables from NGR to monitoring panel. It may be noted that residual current transformer (for sensing NGR current) and coupling device/sensing resistor may be required to be installed in the NGR panel for maximum effectiveness. Conversely, neutral cable shall be first routed through the monitoring panel and then to NGR.

In such a case, the monitoring panel shall be provided with suitable bushings/ terminal box (as given in the description for NGR panel) for termination of the neutral cable.

Elements connected to the NGR are subject to line-to-neutral ground-fault voltages and must be evaluated in all failure modes. Coupling devices must not transfer hazardous voltages to associated monitoring equipment.

Atmospheric electrical conditions, such as the presence of charged clouds, can affect an electrical substation feeding overhead lines. An NGR monitor used in this application must be immune to these conditions.

The measurements made by an NGR monitor can be useful when evaluating system problems. An analog signal (Meter) can be used to provide local earth-leakage-current metering.

NGR Monitor Panel Dimensions (L X B X H), minimum = 600 mm x 500mm x 600 mm

Technical data for NGR monitoring panel components:

Components like NGR monitor, coupling device and current transformer shall be of one make only for compatibility, from either of the following manufacturers.

1) Bender, USA, 2) Startco, Canada, 3) i-Gard, Canada 4) Pyok' dv's

a) Monitor:

Make / Model : Bender- "RC48N" / Startco- "SE-330" / i-gard- "Sigma" / Pyok' dv's

Supply voltage 230-250 VAC, 50 Hz

Response value, voltage measurement adjustable from 20 V to 400 V

Response value, residual current adjustable from 0.1 A to 10 A

Response delay adjustable 0.1 s to 2 s

Switching elements (alarm relay) 2 Form C contacts

Rated contact voltage AC 250 V / DC 300 V

Limited making capacity AC/DC 5 A

Switching elements (GFA, NRA) 1 N/O contact each

Rated contact voltage AC 250 V / DC 300 V

Limited making capacity AC/DC 5 A

Test of the electromagnetic compatibility (EMC)

Immunity according to IEC 62020

Emissions according to EN 50081

Emissions according to EN 55011/CISPR11 Class A

b) Coupling device/sensing resistor for NGR Monitor: As per manufacturer's design and catalogue

c) Residual current sensing C. T. for NGR Monitor

Internal dia: > or = 70 mm

Rated voltage: >800 V

Rated primary residual current: 10 A

Rated secondary residual current: 0.01 A

d) Output relay with sufficient nos. of potential free NO and NC contacts

The relay shall be used for initiating audio-visual alarm (or shutdown of the main breaker of generator or transformer). Relay shall be contactor type. No plug-in type relay shall be used.

The make of the relay shall be Telemecanique (model TeSys, D or K model)/ GE / Siemens

e) Alarm indicator & operator panel with visual annunciation for NGR fault / Ground fault / Trip and buzzer.

Suitable alarm indicator and operator panel with LED indication lamps for Ground fault and NGR fault annunciation and push buttons for test and reset functions along with buzzer shall be installed in the monitor panel.

Visual annunciation for NGR fault and ground fault will be through LEDs (labelled "NGR Fault" and "Ground Fault").

LEDs shall be of suitable voltage, size 22.5 mm. Make-Siemens/ L&T/ BCH/ Binay/ Telemecanique.

Audio annunciation will be through a buzzer mounted inside the monitor panel. Buzzer shall be suitably rated for continuous duty. Buzzer supply shall be of suitable AC voltage. Make-Siemens/Schneider/BCH/L & T.

LEDs and Buzzer shall be mounted on the front door of the monitor panel. Test and reset buttons on the front door of monitor panel shall be provided for testing of the NGR and GFA test circuits from the NGR monitor.

Test and reset buttons make-Siemens/Schneider/BCH/L & T.

Reset button will silence the buzzer, but the LEDs will remain on till the time fault is detected and cleared.

The indication LEDs, test and reset push buttons on the front door shall be in addition and external to the G/F & NGR monitor (which may have these functions built-in).

f) Incoming 230/240 V, 50 Hz AC supply with HRC fuse-base and link for power supply to monitor panel

Power supply to the monitor panel shall be through suitably rated HRC fuse link, MCB and transformers (if required to step down to the voltage level of monitor panel components supply).

Separate circuits through fuses shall be used for the monitor and audio-visual annunciation panel.

Moulded HRC fuse holders with suitably rated fuse links; make- GE/Telemecanique. MCB make: Legrand, Telemecanique, Havells. Control transformer make: AE/L&T/Kappa.

Separate isolation fuse link and an MCB shall be provided for switching power supply to NGR space heater. Space heater shall be controlled through an adjustable thermostat.

Note:

- 1) Installation and commissioning shall also be under the scope of this tender.
- 2) Foundation and suitable rain protection canopy shall also be provided for installation of NGR in an open area near the transformer.
- 3) Control cable required for commissioning shall also to be supplied, laid and connected suitably by the supplier.

E. Supplying and laying and terminations of XLPE insulated and PVC sheathed armoured cable of 1.1KV grade with aluminium conductor as per IS: 1554/ IS :7098 with latest amendments in ground as per IS: 1255 including excavation of 30cm X 75 cm trench, 25mm thick under layer of sand, second class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc for 3.5 core X 240 Sq mm cable. Cable to be laid from 500KVA and 250 KVA transformers to OIL's existing distribution panel located inside Baghewala # 6 and for other LT

panels to be provided by the supplier in Baghewala # 1 , 4 & 5 with proper cable marker along the route of the cable. : **Six hundred (600) mtrs**

Make: Havells/ CCI/Finolex

- F.** Outdoor type distribution panel board (Mounted on a stand) with provision of cable entry from the bottom with IP: 65 protection to be fabricated from 2mm CRCA sheet steel and built upon suitably sized frame work with minimum 3.15mm thick sheet steel. The entire framework and sheet work shall be given 7 tank anti rust treatment as per relevant IS before powder coating. The panel to be incorporated with multifunction meter for display of voltage, current, KWH. Suitable aluminium Bus Bars (Capacity – Minimum 800 Amps) shall be incorporated with following incoming and outgoing feeders:

Incomer: 2 nos. (one for DISCOM & the other for DG supply) with 630 A, 50 KA breaking capacity, 4 pole MCCB with earth leakage CBCT protection with remote tripping provision and mechanical interlocking facility between two incomers.: **Three(03)**

Outgoing:

- 1) Two (02) Nos. 40 HP Star delta starter with suitable motor protection MCCB, earth leakage module, overload relay, single phasing preventer, ON-OFF -TRIP, LED indication lamp
- 2) Two (02) Nos. 25 HP DOL starter with suitable motor protection MCCB, earth leakage module, overload relay, single phasing preventer ON-OFF -TRIP, LED indication lamp
- 3) Four (4) nos. Spare feeder with 100 Amps, 36KA breaking capacity, 4 pole MCCB with Earth leakage module
- 4) One (1) no. Spare feeder with 200 Amps, 36KA breaking capacity , 4 pole MCCB with Earth leakage module
- 5) One no Lighting Distribution box with 63 Amps, 300 mA RCBO as incomer and with 18 nos 10A double pole MCB (6 nos per phase) as outgoing for lighting circuit.

For Panel:

- 1) One (01) No. suitable automatic power factor controller. (to maintain Power factor above 0.95)

Note:

- 1)All MCCB must have adjustable overload and Earth leakage modules shall have adjustable earth leakage protection.
- 2) Panel shall be procured from only CPRI approved manufacturer.
- 3) All starters must have provision for remote operation
- 4) Design shall be such that control supply for starters shall be 110V AC.
- 5) Panel Shall have provision for earthing and shall be earthed as per IS 3043 and CEA regulation 2010 with latest amendments. Proper earth pits with concrete covers shall be made for this purpose.

Make:

- 1) MCCB, MCB & RCBO: Schneider/ABB/Siemens
- 2) Over load relay, contactor: Schneider/ABB/Siemens
- 3) Foundation for the panel shall also be under the scope of the supplier.

- G.** Supply, Installation, testing and commissioning of High lumen efficient out door type IP:65/66 category, 90 Watt LED Flood light complete with constant current driver & all accessories for lighting Shall be fitted on area lighting poles - 2 fittings per pole or as deemed fit. -**Sixty (60) nos**

Make: Philips/Havells/Bajaj/GE/Crompton Greaves

Note:

- 1) LED light with fitting shall be warranted for four years.
- 2) Spare LED driver to be included with supply – Fifteen (15) Nos.

H. Lighting Pole: 9 mtrs length: **Thirty (30)nos**

Supply, erection and concrete foundation with suitable stainless steel nut bolts with following pole specifications:

Pole with its accessories

Type of pole: Hot Dip Galvanized Tapered Octagonal Poles with suitable size GI bracket.

Steel: Grade BSEN 10025-S355J0 or Equivalent

Base Plate: IS 2062 or Equivalent.

The poles shall be hot dip galvanized as per IS: 2629 / IS :2633 / IS: 4759 standards with average coating thickness of 70 micron. The galvanizing shall be done in single dipping.

Pole Height: 9 M

Pole bracket (GI) length shall be 1M with boom angle 15 degree.

Diameter (A/F): as per manufacturer recommendation.

Thickness: As per manufacturer recommendation

Pole Base: as per manufacturer recommendation.

Foundation Bolt dimension: as per manufacturer recommendation.

The galvanized mounting bracket 2 nos per pole shall be supplied along with the Octagonal Poles for installation of the 2 nos luminaries per bracket.

The pole manufacturing & galvanizing unit shall be ISO 9001: 2000, ISO14001 & OHSAS 18001 certified to ensure consistent quality & environmental Protection.

The octagonal Poles shall have hinged door of approximate 500 mm length at the elevation of 500 mm from the Base plate. The door shall be vandal resistance and shall be weather proof to ensure safety of inside connections.

The door shall be flush with the exterior surface and shall have suitable locking arrangement.

There shall also be suitable GI nut / stud arrangement on the base plate for the purpose of earthing with 25x6 mm² GI strap Earthing as per the details in technical specification.

The pole shall be adequately strengthened at the location of the door to compensate for the loss in section.

One No 3mm thickness GI plate shall be welded at suitable place inside the pole at the door to accommodate fix following size Street lighting Junction Box (JB shall be as per technical Specification)

Size of the Metallic Junction Box (JB): 190x105x70 mm³

Wiring Cable:

Wiring of lighting cable from top of the bracket and PVC Junction Box to be done with 3x2.5sq mm PVC stranded copper cable

All power wiring cable shall be as Per IS: 7098 (Part 1) 1988 and for PVC insulated, unsheathed, 1100V grade, FIA, TAC, IS-694 approved with flexible copper conductor.

Pole Earthing : Pole earthing unit shall be made with pre-fabricated GI plate of size 150x150x6 mm³ welded with 25x6 mm² size 2 Meter long GI strap.

Street lighting Junction Box

Street lighting junction box shall be a pre-fabricated 3 Module metallic MCB Box, IP20 with the following components. And shall be suitable size to accommodate inside the octagonal Pole at the Hinged Door.

COMPONENT SIMILAR TO LEGRAND CAT NO. QUANTITY

1.0 TP ENCLOSURE 6078 83- 1 No

2.0 32A ISOLATOR 6040 01- 1 No

3.0 6A MCB 6032 29- 2 No

Note:

1)All the items shall be under the scope of the supplier

2) Any item not mentioned above, but required for proper installation and commissioning, shall be under the scope of the supplier.

I. Cable (4 core X 6 Sq mm): Supplying and laying and terminations of XLPE insulated and PVC sheathed armoured cable of 1.1KV grade with **stranded copper conductor** as per IS :7098 with latest amendments in ground as per IS: 1255 including excavation of 30cm X 75 cm trench, 25mm thick under layer of sand, second class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc for 4 core X 6 Sq mm cable. Cable to be laid from LT panel lighting distribution box to all the area lighting poles. - **One thousand (1000) mtrs**

Make: Havells/CCI/Finolex

Note:

Any item not mentioned above, but required for proper installation and commissioning, shall be under the scope of the supplier

J. Cable (4 core X 16 Sq mm): Supplying and laying and terminations of XLPE insulated and PVC sheathed armoured cable of 1.1KV grade with **stranded copper conductor** as per IS :7098 with latest amendments in ground as per IS: 1255 including excavation of 30cm X 75 cm trench, 25mm thick under layer of sand, second class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc for 4 core X 16 Sq mm cable. Cable to be laid from LT panel lighting distribution box to all the area lighting poles.- **Five hundred (500) mtrs.**

Make: Havells/CCI/Finolex

Note:

Any item not mentioned above, but required for proper installation and commissioning, shall be under the scope of the supplier.

K. Revival of existing area lighting (400 W metal halide fitting) 15 nos at Baghewala # 6- One set

Note:

- 1) Jobs shall be carried out through competent Electrical personals for respective jobs and supervision through competent Electrical personal holding supervisor's certificate of competency issued by State Licensing Board.
- 2) All safety procedures shall be followed while carrying out the jobs.
- 3) Tools and tackles shall be under the scope of the supplier.
- 4) Operation and maintenance of all the equipment shall be carried out by the service provider throughout the tenure of the contract (as per contract provisions).
- 5) Earthing related to 4 pole structures, Transformers, NGRs and Distribution panel boards shall be carried out by 50mm X 6 mm GI straps. Area lighting poles and other equipment shall be carried out by 25mm X 3 mm GI straps.
- 6) All earth electrodes shall be Chemical type with standard length and a minimum of Thirty-six (36) electrodes shall be provided for all the locations. Any excess requirement shall be the responsibility of the Supplier/service provider.
- 7) Masonry work for all jobs shall be under the scope of the supplier.
- 8) Four pole structure metallic parts painting and grouting of poles shall be carried out suitably.
- 9) CEA regulation 2010 with latest amendments shall be strictly followed while carrying out the jobs.
- 10) Permission from State Electrical Inspector shall be obtained before energization by the supplier/service provider
- 11) Any suggestion given by the Electrical Inspector shall have to be implemented by the supplier/service provider at his own cost.
- 12) LED light fittings shall be warranted for four years.
- 13) Warranty for items like Transformers, NGRs, cables, electrical panel with components, four pole structure components etc. shall be warranted for 18 months from the date of supply or 12 months from the date of commissioning, whichever is earlier.

- 14) All warranty certificates shall be issued by the manufacturer with signature and seal by the supplier
- 15) Transformers, NGRs, Electrical Panels – approval shall have to be obtained from OIL prior to manufacture.
- 16) Bill of materials for four pole structure – approval shall have to be obtained from OIL prior to supply.
- 17) Test certificates of all the items like Transformers, NGRs, cables, Electrical Panels, four pole structure components (Isolators, DO units, Lightning Arresters) shall have to be submitted along with the supply of the materials.
- 18) Earthing of other metallic parts (like crude oil tanks etc.) of the installations shall have to be carried out as per IS: 3043 and CEA regulation 2010 with latest amendments.
- 19) Unused cables shall have to be stored properly for future use.
- 20) No item will be provided by OIL while carrying out the jobs mentioned above.
- 21) **Inspection & Testing:** Inspection and testing of Transformers, NGRs and Electrical distribution panel boards shall be carried out in the premises of the manufacturer prior to despatch. Supplier/manufacturer shall intimate OIL 10 (ten) days in advance for the said inspections.

7.0 MANPOWER FOR PART-A

i) All personnel deployed by the Service Provider must have adequate experience in their respective field including the electrical jobs. The Service Provider shall provide details of experience, qualification and other relevant data of the personnel to be deployed for scrutiny and clearance by the Company before the actual deployment. The Service Provider shall have to deploy the aforesaid persons after being certified and cleared by the Company only for the period of the Agreement. For any change of the appointed personnel due to extra ordinary situation, the Service Provider may do so after being permitted and approved by the Company. On Company's advice, the Service Provider shall remove and replace, at their expense, any of their personnel whose presence is considered unsatisfactory in the opinion of the Company. However, the new recruitment shall take over the responsibility prior to their release of the concerned personnel.

ii) The workforce has to be engaged with proper uniform i.e. cotton overall for every personnel clearly mentioning the contractor name in the front side & back side, personnel name & blood group. The workforce should be provided with proper PPE i.e. good quality safety shoe, helmet, goggles, hand gloves, ear plug etc.

iii) The Contractor shall nominate one of their personnel as **Maintenance in-charge / Manager** who shall be in charge of the Contractor's personnel and who shall have full authority to resolve all day to day technical or other matters which may arise at the site. The person will be responsible for providing daily progress report to OIL.

The **Maintenance in-charge/ Manager** shall be an Engineering Graduate in Mechanical/Electrical/Instrumentation Engineering with minimum five (5) years of experience or Engineering Diploma in Mechanical/Electrical/Instrumentation with minimum ten (10) years of experience in maintenance of any production installations. Alternately he may be a science graduate with PCM and having at least ten (10) years experience in maintenance of any production installation. The person shall be fully conversant with the maintenance activities of gas/oil separators, different pumps/ motors, flow lines, field instruments etc. Additionally, he must have adequate experience and managerial skill to lead a multidisciplinary team.

iv) All persons deployed by the Contractor under this contract should be issued identity cards stating the name of the contractor and the work and its validity period.

v) The contractor shall provide skilled and experienced manpower covering all disciplines to revive the plant and install all electrical equipment within the contract period. OIL is considering the minimum requirement of the following Key Personnel at site during the contractual period.

- a) Maintenance in-charge/ Manager

- b) Mechanical Technician
- c) Instrument Technician
- d) Electrical Technician
- d) Unskilled Helper
- e) NDT Personnel
- f) Electrical Supervisor
- g) Electrical linesman

Contractor shall be required to deploy additional manpower, if required to complete the jobs as per scope of work within the contract period.

vi) The Bio-data and experience of the personnel has to be produced by the Contractor for scrutiny by OIL before deploying them for the job.

8.0 DESCRIPTION OF PRODUCTION FACILITIES AND INFRASTRUCTURE FOR PART-B OF THE CONTRACT:

Production Facilities and Infrastructure for PART-B of the Contract:

- i) Pilot Plant:
 - a) Medium Pressure Boiler battery along with ancillaries (water treatment plant, diesel pumps, air compressor etc.) at Baghewala Pilot Plant;
 - b) Production Surface Setup at Baghewala Pilot Plant;
- ii) Well Site:
 - a) High Pressure Boiler battery along with ancillaries (water storage tanks, diesel pumps, air compressor etc.) at Well site;
 - b) Surface Set-up at well site- Sucker rod pumps (2 nos.), separators, Flare stack etc.
- iii) Crude, Water, Steam & Gas Flow line network for Baghewala Fields;
- iv) Oil wells with facilities;
- v) Fire Service Facilities at Pilot Plant & Well Site;
- vi) Power Supply Systems at Pilot Plant & Well Site;
- vii) Instrumentation, SCADA and Telecommunication system.
- viii) Any Other production facilities of Baghewala

8.1 Process Description:

The quality of the crude oil from the Baghewala PML area are of high viscous having °API around 14 ° – 18 °API. Natural production of the crude from these wells are not possible. So, OIL intends to produce the oil through Cyclic Steam Stimulation (CSS) method or using artificial lift by using Sucker Rod Pump (SRP) or Progressive Cavity Pump (PCP). Steam injection is an increasingly common method of extracting such type of heavy crude oil. In Cyclic Steam Stimulation (CSS) there will be three phases:

- a) Injection Phase: The high temperature saturated steam produced from the HP Boiler will be injected to the well for a definite period of time as per OIL requirement (21 days).
- b) Shut-in Phase: After injection the well will be shut-in and kept in soak period for some days (7 days).
- c) Production Phase: After shut-in phase, the viscosity of the oil will reduce and the oil will be produced by Sucker Road Pump.

A) OIL has installed two (2) nos. of HP Boiler of maximum working pressure of 176 kg/cm² with other ancillaries for producing steam for injection into the well bore. The raw water from the RCC water pond will be treated at Water Treatment Plant at Pilot Plant. The treated water will be pumped to the Well Site around 10 kms. by underground pipeline. The treated water will be stored in overhead water tank for steam production in the HP boiler. After injecting HP steam into the well bore and after soak period, the viscosity of the hydrocarbons decrease and the low viscous liquid will be produced. The produced

emulsified liquid will be degasified at the well site and the gas will be flared. It has been planned to pump the liquid to the Production Surface Set-up at Pilot Plant through pipeline.

B) The liquid pumped from the well site goes through a two phase separator (V-01), whose operating pressure is 3.0 kg/cm²g. Two streams are separated here: gas and liquid. The H₂S scavenger solution is dosed at the inlet of the separator to reduce H₂S concentration thereby reducing the chances of corrosion. The well fluid entering the separator has a tendency of foaming so suitable Antifoam solution is dosed at the inlet to the V-01. The entire production line is suitably jacketed with the MP steam at design pressure of 12 kg/cm²g & temperature of 80 degC to maintain the temperature of the fluid. There will be two (2) nos. of Medium Pressure Boiler of maximum working pressure of 12 kg/cm² with other ancillaries for producing MP steam. Steam heating coil has also been provided in the separator. V-01 has been provided with all necessary control instruments such as electronic level indicator controller, electronic pressure indicator controller, low level alarm and switch, high level alarm and switch, pressure gauges, safety relief valve etc. The gas separated out is sent to the Knock Out Vessel (V-02) for arresting the liquid droplets and the dry gas shall be sent for flaring. H₂S scavenger solution is also dosed at the inlet to the V-02 to reduce the H₂S content in the hot flared gas. The liquid arrested in the V-02 and the liquid drain from V-01 shall be collected in the Storage Pit. The crude oil will be stored in steam jacketed crude oil storage tanks. The crude will be loaded to the tanker through bowser loading pump installed at the installation and will be dispatched to the designated customer. All the dosing chemicals are dissolved in diesel for making solution. The MP steam condensate is sent back to DM Plant as condensate for recycling.

Note: OIL may modify the process as per requirement for production of crude.

8.2 Fire Service Facilities:

Fire fighting facilities includes adequate number of portable fire extinguishers at strategic points, 1 No. of diesel engine driven fire water pump along with fire water ring main with hydrant, hoses, monitors, drenching and foam system to cover the processing equipment.

OIL may provide Fire Tender for Baghewala fields for fire fighting.

8.3 Power Supply Systems:

a) At Well Site: 1 No. 270/320 KVA Diesel Generator set with standby Generator set is installed to take care of power supply.

b) At Pilot Plant: 1 No. 180 KVA Diesel Generator set with standby Generator set is installed to take care of power supply.

Note: OIL may install additional low capacity Diesel Generator set for area lighting of the installations.

8.4 Instrumentation, SCADA and Telecommunication system:

Instrumentation, SCADA and communication system is designed and implemented for complete automation of the plant and the boilers. The boilers are equipped with Siemens PLC & SCADA and the Pilot plant has digital indicating controller, alarm annunciator etc.

Handheld walkie-talkie operating at VHF will be provided for intra communication at plant and at well site.

9.0 SCOPE OF WORK FOR PART-B (O&M):

9.1 PRODUCTION:

i) To operate the boilers and its ancillaries and produce high quality steam for Heavy Oil exploitation. Preventive maintenance schedule should be maintained and executed accordingly. To check and record process parameters of the boilers and recorded the same in Service Provider's log-sheet in each shift on hourly basis. For any abnormality observed, corrective actions shall be taken instantly. For any critical situation the matter should be mutually discussed with the Company's representative.

- ii) To operate & maintain the Water Treatment Plants. To maintain the parameters of the treated water like pH, Oxygen & Conductivity within acceptable limit as per OIL instruction. Chemicals for water treatment will be provided by the Company.
- iii) To operate the wells of Baghewala fields for steam injection and production. To check and record flow line pressure of the wells and the same shall be recorded in log-sheet in each shift on hourly basis. For any abnormal increase or decrease of the same, corrective actions shall be taken instantly.
- iv) To operate and maintain the Sucker Rod Pumps deployed at the well sites. Pulling-in & pulling-out of the rod and pump as per instruction of OIL site-in-charge. Also to operate PCP in OIL'S designated wells with such facility.
- v) To maintain all the manual valves in perfect operative condition, a preventive maintenance schedule shall be maintained and executed accordingly.
- vi) All repairing jobs including general maintenance of the valves, leakage in the flow lines, gas/oil separators and supervision of flare stack shall be carried out by the Service Provider. The Service Provider under advice of the Company representative will carry out any emergency repair jobs at flow line, wellhead and flow lines.
- vii) To monitor closely and maintain desired Separator operating back pressure at all time during plant operation. The desired separator operating pressure shall be decided by OIL and during the course of plant operation if OIL feels to change the same, the Service Provider shall follow the instruction. The change of operating back pressure at separators and subsequent pressure vessels may be required for operational reasons. The operating pressure of various pressure vessels shall be recorded in Service Provider's log sheet in each shift on hourly basis.
- viii) To closely monitor the proper functioning of auto/manual drain valves installed in the various vessels. For any minor or major operational disorder, the Service Provider shall take corrective measures for smooth running of the plants at the shortest possible.
- ix) To check & record the stock of chemicals and preparation of the solution without failing the plant operation. Chemicals will be provided by the Company.
- x) To check & record the diesel stock in log-sheet in each shift. Diesel shall be provided by the Company.
- xi) All repairing and maintenance of the pumps, control valves, safety valves etc. installed in the Boilers & in the surface setup shall be carried out by the Service Provider.
- xii) To check and record daily crude oil production rate in the storage tanks. Manual draining of water shall also be necessary from the storage tank from time to time that might be accumulated in the tank and proper record of the same shall be made. The produced crude will be sold by OIL to customer. Service provider to monitor and record opening, closing and delivery stock etc. in log sheet and unload the crude from storage tank to customer's tanker on advice from OIL.
- xiii) The Service Provider shall see the proper functioning of all pumps installed at the installation for various purposes. All the repairing/maintenance jobs of the pumps shall be carried out by the Service Provider. A preventive maintenance schedule shall be maintained and shall be followed accordingly.
- xiv) The Service Provider shall prepare a preventive maintenance calendar / schedule and get it approved from the Company before commencement of work and follow the schedule. Failure to carry

out the preventive maintenance schedule shall include penalty to the extent of contractual rates and any plant shut down for such failure / negligence the penalty clause as specified in **Para 4.0 of SECTION-II** of the Tender document shall be applicable.

xv) Stationeries including print paper, glue sticks, pencils and pens, file cover, envelope etc. required for day to day operation and maintenance (office) shall be to Service Provider's account.

xvi) Maintenance and proper water storage in the water pond, overhead water tanks upto the safe level for operating.

xvii) Service Provider shall carry out any types of welding as per API-1104, AWS D10.4- 86, ASME-B-31.3 and IBR required for maintenance activities. For welding in piping, pressure parts under IBR, only qualified IBR welder shall be engaged. IBR welding shall be carried out as per IBR-1950.

In general, IBR Code is applicable but not limited to:

- a. Piping & Equipment where Steam Pressure is 3.5 Kg/Cm² & above. Piping transporting Steam from source to destination.
- b. Any equipment where steam is produced viz. Reactors, Exchangers, Convection Coils, etc.
- c. Any equipment where steam is consumed, except Steam Turbine & other machinery.
- d. Pipe, transporting steam, of 10 inches & above. This will be irrespective of Steam Pressure.

xvii) The Contractor has to arrange for all statutory registration and approval required from IBR as per their guidelines from time to time on behalf of the Company. The Contractor has to take endorsement from the Company on all the documents as required for necessary IBR approval. The cost incurred for IBR approval will be paid by Company at actual on submission of bill/receipt after acceptance only. All type of tests required for IBR approval will be carried out by the Contractor at its own cost.

9.1.1 CONDUCTING OIL PRODUCTION, TESTING, PROCESSING & METERING:

(i) The Service Provider shall carry out all operations hereunder with due diligence in a safe and workman like manner and in accordance with accepted international oilfield Practice and various Statutory Rules/Laws viz. OMR, DGMS, OISD, Indian Boiler Regulations, Pollution Control, etc.

(ii) The Service Provider shall be solely responsible for the operation of the installations at Baghewala Production Surface set-up and Well site set-up including but not limited to supervising various operations at fields as required by Company as well as such operations at the aforesaid installations as may be necessary or desirable for the safety of the installations. **For all such operation Service Provider has to arrange their own transportation.**

(iii) The Service Provider shall observe such safety regulations in accordance with acceptable oilfield practice and applicable Indian laws. Service Provider shall take all measures reasonably necessary to provide safe working conditions and shall exercise due care and caution in preventing fire, explosion and maintain firefighting equipment in sound conditions at all times. Service Provider to provide all necessary safety gears required to work in an oil & gas mine to its employees at their own cost.

(iv) The Service Provider shall at all-time be responsible for keeping an accurate record of production, pressure, temperature etc. The Service Provider shall at all-time be responsible for keeping an accurate record of production, pressure, temperature etc. **A daily check list for boilers and well set up (separate) will be prepared by service provider which will be vetted by OIL personal and the same has to be adhered and maintained at installations.**

(v) In the event of any fire or explosion, Service Provider shall use all reasonable measures at his disposal to protect the aforesaid installations bring the said fire or explosions under control.

(vi) It is expressly understood that the Service Provider is an independent Service Provider and that neither it nor its employees and its sub-contractors and employees or agents of the Company provided, however, the Company is authorized to designate its representative who shall at all time have access to the aforesaid installations, related equipment and materials and all records, for the purposes of

observing, inspecting and designating the work to be performed hereunder by the Service Provider. The Service Provider shall treat the Company's Representative at site as the in-charge of the Company. The Company's representative may, amongst other duties, observe, test, check and control works performed by the Service Provider or examine records kept at installations by the Service Provider.

(vii) Compliance with Company's instructions: The Service Provider shall comply with all instructions of the Company consistent with the provision of this Agreement, including but not limited to aforesaid installations, operations, safety instructions, confidential nature of information etc. Such instructions shall, if the Service Provider requests, be confirmed in writing by the Company's representative.

(viii) Records to be kept by the Service Provider: The Service Provider shall keep and furnish to the Company accurate records of the rate of production, pressure, temperature, quality and quantity of produced and dispatched oil and other necessary parameters of the installations & all electrical data. A legible copy of the said records in duplicate signed by both Service Provider's and the Company's representative shall be furnished by the Service Provider to the Company. Also the Service Provider has to maintain all statutory records as per DGMS, OISD & Boiler Act Guidelines in the required format for field installations.

(ix) Confidentiality of Information: All information obtained by the Service Provider in the conduct of operations shall be considered confidential and shall not be divulged by the Service Provider or its employees to anyone other than the Company's representative. The Service Provider to sign a Confidentiality Agreement with OIL. This obligation of the Service Provider shall be in force even-after termination of the Agreement. The Service Provider shall carry out normal maintenance of the Company's item at the aforesaid installation excepting for those items which the Service Provider is not qualified to or cannot maintain or repair with its normal operating personnel and equipment.

(x) Ingress and Egress at Installations: The Company shall provide the Service Provider requisite certificate for obtaining rights of ingress to egress from the installations. Should such certificate be delayed because of objections of appropriate authorities in respect of the Service Provider's specific persons, such persons should be promptly removed from the list by the Service Provider and replaced by acceptable persons.

(xi) Protection of property and existing facilities: The Service Provider shall perform each work in such a manner that will prevent damage to the Company's property and shall carry on the works in such a manner as to conform to and consistent with and not to interfere in any way with continuous and safe operation of the installations. Any permanent damage/loss to the Company's assets, plants, wells due to the operation of the service engaged under this Agreement shall have to be remedied by the Service Provider entirely at its own cost, which shall include and not limited to actual replacement of such damaged assets, plants, wells or payment of actual replacement cost in relation there to as may be incurred by the Company.

Bridging Document: A duly signed Bridging Document mentioning the roles and responsibilities of Company and the Service Provider shall be made available at site for reference of all statutory visitors. The Bridging Document shall clearly demarcate the individual Scope of Work for both the Company and the Service Provider.

9.2 INSTRUMENTATION:

i) The Service provider will maintain all the field instruments as per OEM manuals and record of such maintenance will be provided to OIL. Any breakdown of instruments will be attended promptly by the Service Provider and record of such breakdown will be kept and made available to OIL. Suitable preventive maintenance schedules shall be prepared as per recommendations of the manufacturer/OIL and to be submitted to OIL.

ii) Calibration of all the field instruments will be carried out quarterly by service provider or as whenever required. The Service Provider shall make schedule for quarterly calibration of all instruments and follow it strictly. After calibration of field instruments, report shall be prepared. Moreover, all the carried out day to day maintenance jobs must be recorded properly in the Instrumentation Maintenance register.

- iii) All control panels and control room to be kept neat and clean with the help of vacuum cleaner only. Trenches and cabinets will be kept clean and naphthalene balls and silicon packet should be kept to keep rodents and moisture away. The Service provider will not allow eatables inside the control room of the boilers & plant.
- iv) Calibration of the Portable Gas Detector shall be carried out as per calibration schedule provided by OIL in presence of Instrumentation Engineer (OIL). After each calibration, calibration reports must be generated as per the Format provided by OIL.
- v) All the Equipments provided by OIL like Pressure Calibrator, Multifunction Calibrator, Portable Gas Detector, Walkie-Talkie etc. shall be properly handled & maintained as per the Operating & Maintenance Procedures and keep in proper operating condition by the Service Provider during the contract period. Service Provider has to repair for any defects / malfunction observed due to mis-handling of these instruments at their own cost. The repairing jobs must be carried out for a particular instrument at authorized service centre only. The calibrators after repairing shall be calibrated by the contractor at NABL certified calibration laboratory.
- vi) The contractor shall provide good quality tools & tackles including HART Communicator, multimeter, megger etc. to the field personnel required for day-to-day maintenance.
- vii) All the available instrumentation spares kept in Instrumentation Workshop as well as inside the Control Room of the installations must be recorded with proper documentation and inform Instrumentation Engineer (OIL) immediately after use / replacement of any spares for necessary updating in SAP system.
- viii) VHF communication equipment i.e. walkie-talkie will be maintained as per OEM manual and batteries to be charged regularly.
- ix) VSAT equipments are maintained by third party under AMC but service provider will keep equipments neat and clean and report malfunctioning of such equipments to IT Engineer (OIL) based at Jodhpur immediately to take necessary rectification.
- x) All the instrument sets for voice communication should be maintained properly and any damage or malfunction observed must be rectified / replaced with new by the Service Provider.
- xi) Major break down if any would need to be repaired internally or outsourced to a special team for repairs and maintenance. If required, experts for the special equipments like PLC, SCADA, analyzer etc. will be organized from the OEM.
- xii) All accessories not spelled out above but part of the system will be promptly attended by the Service Provider and must be noted down as point no. (ii) above.

9.3 TECHNICAL SERVICES:

- i) Operation & Maintenance of D.G. sets installed at well site & at pilot plant of different capacities (30 KVA/180 KVA/270 KVA/320 KVA) with associated control panels, MCC panels, switch gear etc. The capacity under the scope of the contract may change. All regular running maintenance jobs, including OEM specified checks, replacement of various filters, belts, etc. (if required), periodic oil change, etc. to be done at contractor's cost including materials. For major jobs requiring specialized skill and set-ups, the same is to be brought to the notice of OIL and prior concurrence obtained for carrying out such jobs, which will be reimbursed by OIL on actual basis. All replaced spares to be deposited with OIL. Contractor will maintain a log of running hours of all DG sets.
- ii) Operation and Maintenance of all air conditioners, air coolers. Contractor shall be required to provide Refrigerant filling as required.
All regular running maintenance jobs, including supply of minor spares less than INR 500.00 per unit will have to be carried out from the contractor's end. For jobs involving replacement of major spares, concurrence from OIL is to be taken prior to carry out of such jobs.
- iii) Operation and Maintenance of various AC motors and their switchgears, centrifugal pumps, reciprocating pumps deployed at well site and at the production surface set up.

- iv) Maintenance of pipe/pipe fittings of water line/diesel line/steam line/crude line/gas line/steam trap/water treatment plant/water storage tank/diesel storage tank/crude storage tank etc.
- v) Operation and Maintenance of firefighting arrangement including engine driven fire pump set, fire extinguishers etc.
- vi) HSD supplied to the Company by the Service Provider if any, will be reimbursed by the Company on actual basis (with documentary evidence) plus 5% as handling charge.
- vii) Minor Maintenance of buildings of plant, bunk houses with all fittings, touch up painting, plumbing for water supply, roofing, floors, repair of doors & windows, repair boundary fencing etc.
- viii) Liaison with various original equipment manufacturers as well as government authorities to carryout breakdown maintenance on emergency basis and routine test/inspection of equipment as per statutory requirement.

NOTE: All the above equipment/facilities are deployed for round the clock operation for providing the backup services.

- ix) A daily monitoring report of Technical Service (T.S.) activities with details of job executed, manpower availability, running hours of the equipment, daily electrical energy generation/consumption data, job planned for execution on the following day should report to OIL authorities.
- x) The Service Provider will be responsible for operation and maintenance of all plant and equipment for above mentioned services with proper workmanship, housekeeping and compliance to all safety norms pertaining to OMR 1984, OISD, Indian Boilers Regulations to the entire satisfaction of Engineer-in-charge of the Company.
- xi) The Service Provider should have all the required tools, including special tools/equipment viz. Chain block, electrical insulation hand gloves, discharge stick etc. for carrying out mechanical and electrical maintenance activities smoothly without any time loss.
- xii) Complete rewinding cost of all motors single phase as listed in **Annexure-B** shall be on the Service Provider's account.
- xiii) Rewinding cost of all other motors/alternators, if required, will be carried out with prior approval of OIL and the cost of materials, labour and transportation will be paid by OIL based on actual expenditures supported by documentary evidence.
- xiv) Major break down if any would need to be repaired internally or outsourced to a special team for repairs and maintenance. If required, experts for the special equipments like Burner, Feed pump will be organized from the OEM.

9.3.1 ELECTRICAL:

- i) Operation and Maintenance of related control panels of the DG Sets, Alternators, MCC panels, AUX panels, Change over switches / panels, various distribution boards, lighting transformers, street lighting system etc. of the entire set-up under the scope of the contract.
- ii) Maintenance of different types of electrical motors deployed in the entire set-up under the scope of the contract.
- iii) Operation and Maintenance of various heavy duty batteries used in the prime movers of diesel generating sets, UPSs (5 KVA & less) with batteries etc.
- iv) The relevant details/documents are to be furnished by the bidders to establish their capability for the above mentioned jobs.
- v) Operation and Maintenance of Window Air Conditioners, Air Coolers at surface set-up and at well site consisting of (i) Window A/C – 1.5 T: 6 Nos. (ii) Air Coolers: 4 Nos. However, the number may increase in near future.
- vi) Proper maintenance schedule/record to be made for preventive/schedule maintenance jobs. The break down maintenance to be attended by the Service Provider without loss of time for un-interrupted operation of the plant and boilers and to be reported after completion of the job with proper justifications.

vii) Proper checking as well as record keeping to be maintained as per DGMS guidelines/OMR 1984/OISD/IBR.

viii) Due to non-availability of grid power the DG set is required to run all the time to feed power to auxiliaries and complete lighting system and other utilities. However, OIL may consider for grid power at the set-up in future.

ix) Operation and maintenance of all electrical equipment shall be carried out by the service provider throughout the tenure of the contract

9.3.2 MECHANICAL:

i) Operation and maintenance of prime-mover of various diesel gen sets.

ii) Operation and Maintenance of 2 nos. of High Pressure Boilers, 2 nos. of Medium Pressure Boilers and its ancillaries.

iii) Operation and Maintenance of 1 No. Fire Pump Make: Mather & Platt and its prime movers Make: Kirloskar Engine deployed at Pilot Plant.

iv) Operation and Maintenance of 2 nos. of Water Treatment Plant consisting of Raw Water Pumps, NaOCL dosing tank & pump, SMBS dosing tank & Pump, Brine Tank & agitator, Alkali dosing tank & pump, LP dosing tank & pump, filters & softener, overhead water storage tanks, pipes/pipe fittings etc. Standby pump is available for each.

v) Maintenance of pipe/pipe fittings related to HSD lines including diesel storage tanks, diesel decanting pumps.

vi) Operation and Maintenance of various types of motor driven centrifugal & reciprocating pumps deployed at surface set-up and at the well sites for applications such as diesel decanting, crude oil loading, chemical dosing, Rod Pump etc.

vii) Regular maintenance of pumps including replacement of bearings, packing etc. will be at the service provider's account including supply of materials. Replacement of major spares like impeller etc. will be carried out only with prior concurrence of OIL, costs for which will be reimbursed separately.

viii) For smooth running of all the equipments deployed at surface set-up & well sites and to maintain uninterrupted availability of the equipments, proper maintenance schedule to be prepared to take care of preventive/scheduled/breakdown maintenance including top/major overhauling of various equipment. Daily log sheets consisting of equipment, running hours, jobs carried out, spares consumed, spares in stock, consumption of HSD/Lube oil, jobs planned for next 48 hours etc. to be prepared.

ix) Operation and Maintenance of the ACs, Water Coolers etc. at the well site and at the surface set-up shall be Service provider's responsibility.

9.3.3 CIVIL:

i) Maintenance of buildings of the plant, Boiler control room, bunk houses including supply of manpower and materials.

ii) Cleaning and maintenance of the area inside plant boundary.

iii) Maintenance and repair of RCC foundations of equipments at all the installations under the scope.

iv) Maintenance of the road inside the installation premises, open area and yards, watering of tree plantation & maintenance of trees inside the installations to be carried out by Service Provider.

9.3.4 FIRE SERVICE:

i) Operation & Maintenance of the fire fighting facilities in the sites includes portable fire extinguishers (foam type, DCP type, CO2 type), 1 no. engine driven fire water pump, 1 no. motor driven jockey fire water pump, fire water ring main with hydrant, hoses etc. to cover the processing equipment of the installations.

Proper maintenance schedule is to be made as per IS-2190 with latest revision in order to take care of preventive maintenance/statutory schedule maintenance. Quarterly maintenance records, spares stock and consumption of the spares to be properly maintained and to get duly certified by Company's engineer. Consumption stock of consumables viz. Chemical, foam refill, dry chemical

powder, discharge tubes, CO2 cartridge, refilling of CO2 extinguisher, paints etc. to be recorded in monthly log sheet. All fire fighting chemical/ refilling powder, foam compound, cartridge, discharge tube/hose, CO2 gas, any consumables/ spares will be provided by the Company. However, in case of emergency, bidder will arrange procurement of spares/consumables as per requirement and will be reimbursed on actual with 5% handling charge.

- ii) Weekly testing of water ring mains and associated fire-fighting equipment at plant and its record maintenance.
- iii) Conducting Mock drill as per OIL Mines Regulations-1984/OISD and its record keeping.
- iv) Weekly wet/dry fire drill for emergency preparedness and its record maintenance.
- v) Maintenance and proper water storage in the static water tank exclusively for the fire fighting purpose up to the desired level.
- vi) Weekly testing of fire pump at the plant and its record maintenance - Engine Driven Pump-1 no. & Motor
Driven Jockey Pump-1 no.
- vii) Entire fire fighting responsibility in case of any outbreak of fire inside the Company area/ outside.
- viii) To provide class A and class B standby fire services to any Company's activities in.
- ix) The contractor has to ensure that the fire-fighting systems of the installations are in readiness at all times.

Spares required for day to day maintenance work related to fire-fighting is to be supplied from the contractor's

end at no additional cost. For jobs involving replacement of major spares, concurrence from OIL is to be taken

prior to carrying out of such jobs.

9.4 TRANSPORT/ ACCOMMODATION/ FOODING:

The Service Provider will have to arrange own transport for movement of their personnel for field jobs and other services. OIL will not be responsible for providing any type of accommodation & catering facility to the Service Provider personnel. OIL will provide space for parking accommodation (bunk houses) within BGW#6. But all other arrangements have to be borne by bidder.

9.5 SANITATION:

The Service Provider will have to provide sanitary cleaners along with necessary materials and maintain the installation/premises in clean and perfect hygienic condition. All consumables and chemicals, accessories required for the job shall be arranged by the Service Provider at their cost and shall be included in the O & M day rates.

9.6 PLANTATION AND WATERING:

The Service Provider will have to maintain the existing trees & lawns etc. at the installations and arrange for manure and regular watering adequately. The Service Provider should also arrange for seeds and plants of seasonal flowers time to time for beautification of the premises. All expenses towards this shall be on the Service Provider's account and the O & M rates shall be quoted accordingly. Custody, Safety and maintenance of the entire complex including nourishment/watering of planted trees, Lawns etc., shall be Service Provider's responsibility. All consumables towards this shall be arranged by the Service Provider at their cost.

NOTE:

The Service Provider shall prepare & maintain a separate checklist (daily, weekly, monthly) each for Production, Instrumentation, Technical Services for Operation & Maintenance activities under the scope of work. The Service Provider shall prepare the checklist in consultation with OIL site-in-charge.

9.7 DEFINITION OF WORK FOR O&M:

SL No	Asset	Job description	Remarks
1.	<p>Well Site with Boiler Set-up: This asset has the following main equipment / facilities:</p> <ul style="list-style-type: none"> i. Well Head facilities- 2 OR more nos. ii. HP Boiler-2 nos. iii. Feed Water Pump-4 nos. iv. Heat Exchanger-2 nos. v. Make Up water pump-2 nos. vi. Air Compressor, drier-2 nos. vii. Overhead water tank-2 nos. viii. Rectangular Tank-2 nos. ix. Boiler control panel-2 nos. x. Boiler SCADA system xi. DG sets xii. Static fire fighting system. xiii. Diesel storing & dispensing facilities. xiv. Sucker Rod Pump xv. Separator xvi. Flare Stack xvii. Crude Pumping System xviii. Bunk Houses xix. VSAT & VHF communication system xx. Illumination systems xxi. Boundary Fencing 	<ul style="list-style-type: none"> • To operate & maintain the station with a multidisciplinary team of skilled workforce. The job shall be carried out as per OIL instruction. • Monitoring of wells on daily basis. Recording of various well head parameters on daily basis. • Scheduled maintenance of well head valves and fittings. • Replacement of well head valves and fittings, if required, closing/opening of wells as per OIL's site-in-charge instruction. • Operation & maintenance of complete Sucker Rod Pump set-up, Running-in & Running-out of the rods as per OIL's site-in-charge instruction. • To associate with well commissioning & work over & Drilling operations of the wells as and when required. • Any other jobs pertaining to O & M of the wells. • To operate & maintain the stations with a multidisciplinary team of skilled workforce. The job shall be carried out as per OIL instruction. Minimum skilled required to carry out the job is given under para-v of Clause 10.0 of this document. • Job involves running of the boiler and producing dry saturated high quality steam, injection of steam to the reservoir through well head. • Operation of The Sucker Rod Pump as 	<ul style="list-style-type: none"> • The jobs under wells shall generally be carried out as per OIL instruction. • Tools and equipments required for the job shall be provided by Company at free of cost. • Service Provider to engage manpower of required skill to carry out the jobs as described. • All office stationeries including log sheet, pen, paper, printer cartridge etc. shall be arranged by the Service Provider. • Maintenance of the capital equipments including provision of spares shall be Service Provider's responsibility. • For electrical job: Light bulb, tube, switches, fuse, and other fittings and fixtures for lights shall be considered as consumables. • Maintenance of Earthing pits including consumables shall be Service Provider's responsibility. • To monitor and maintain record of Diesel stock. • Boiler control panel should be kept neat and clean. • Housekeeping of the premise shall be the responsibility of the Service Provider. • Equipments and accessories including consumables like Phenyl, Bleaching powder, pesticides and other cleaning chemicals required for housekeeping shall on Service Provider's account.

SL No	Asset	Job description	Remarks
		<p>per instruction of OIL.</p> <ul style="list-style-type: none"> • Pumping the degasified liquid to the Surface set-up. • Control and data acquisition and recording of the operating and other parameters pertaining to operation. • Preparation & maintaining of records on various safety parameters and statutory records pertaining to HSE. • Preparation of well performance report on daily basis and conciliation of production statement. • To carryout maintenance job to the station as & when required. • To carryout periodical maintenance to various machineries and equipments as per schedule. • Housekeeping and maintenance of the stations. • To carryout periodical internal safety audit for the stations as per safety check list. • O & M of the diesel generators. • O & M of all the electrical equipments and power supply system. • O & M of all the mechanical equipment and machineries. • O & M of all the firefighting equipment & machineries. • O & M of all the instrumentation equipments. 	<ul style="list-style-type: none"> • Consumables like jute, cotton cloth, grease, cleaning oil etc. shall be on Service Provider's account. • The Service Provider should ensure to carry out the welding, cutting and grinding jobs through qualified/experienced manpower as per API-1104, AWS D10.4- 86 and ASME-B-31.3 and IBR qualified welder for welding in boilers, piping, pressure parts under IBR.
2.	<p>Production Surface Set-up: This asset will have/has the following main equipment /</p>	<ul style="list-style-type: none"> • To operate & maintain the station with a multidisciplinary team of skilled workforce. The job shall be carried out 	<ul style="list-style-type: none"> • Service Provider to engage manpower of required skill to carry out the jobs as described.

SL No	Asset	Job description	Remarks
	facilities: i. MP Boiler-2 nos. ii. Feed Water Pump-4 nos. iii. Air Compressor, drier- 2 nos. iv. Overhead water tank- 1 no. v. Separator- 1 no. vi. Knock Out Drum- 1 no. vii. H2S & Antifoam dosing system viii. Flare stack ix. Crude Oil Tanks-10 nos. x. Water Treatment Plant- 2 nos. xi. Boiler control panels- 2 nos. xii. Control Rooms xiii. DG set. xiv. Static fire fighting system. xv. Diesel storing & dispensing facilities. xvi. Bowser Loading system with Pumps xvii. Water Dispatch Pumps xviii. Bunk Houses xix. VSAT & VHF communication system xx. Security Hut xxi. Boundary Fencing xxii. Plant Illumination	as per OIL instruction. <ul style="list-style-type: none"> Job involves preparation of DM water for boilers, running of the boiler and producing dry saturated high quality MP steam, Processing the emulsified liquid received from the well site, Maintaining the temperature of the fluid received from the well by the produced MP steam, storing the Crude in tanks and Loading the liquid to the bowser. Control and data acquisition and recording of the operating and other parameters pertaining to operation. Preparation & maintaining of records on various safety parameters and statutory records pertaining to HSE. Preparation of well performance report on daily basis and conciliation of production statement. To carryout maintenance job to the station as & when required. To carryout periodical maintenance to various machineries and equipments as per schedule. Housekeeping and maintenance of the stations. To carryout periodical internal safety audit for the stations as per safety check list. O & M of the diesel generators. O & M of all the electrical equipments and power supply system. O & M of all the mechanical equipment and machineries. 	<ul style="list-style-type: none"> All office stationeries including log sheet, pen, paper, printer cartridge etc. shall be arranged by the Service Provider. Maintenance of the capital equipments including provision of spares shall be Service Provider's responsibility. For electrical job: Light bulb, tube, switches, fuse, and other fittings and fixtures for lights shall be considered as consumables. Maintenance of Earthing pits including consumables shall be Service Provider's responsibility. To monitor and maintain record of Diesel stock. Boiler control panel should be kept neat and clean. Housekeeping of the premise shall be the responsibility of the Service Provider. Equipments and accessories including consumables like Phenyl, Bleaching powder, pesticides and other cleaning chemicals required for housekeeping shall on Service Provider's account. Consumables like jute, cotton cloth, grease, cleaning oil etc. shall be on Service Provider's account. The Service Provider should ensure to carry out the welding, cutting and grinding jobs through qualified/experienced manpower as per API-1104, AWS D10.4- 86 and ASME-B-31.3 and IBR qualified welder for

SL No	Asset	Job description	Remarks
	xxii. Bunk Houses xxiii. VSAT & VHF communication system	<ul style="list-style-type: none"> O & M of all the firefighting equipment & machineries. O & M of all the Instrumentation equipments. 	welding in boilers, piping, pressure parts under IBR.
3.	Operation and Maintenance of pipe lines	<ul style="list-style-type: none"> Monitoring of field & installation pipe line on daily basis. Repairing/replacement of field & installation pipelines. Excavation and digging and back filling of pipe track or any other assigned civil work. Handling of pipes and pipe fittings of field & installation for above jobs shall be done by the Service Provider. <p>Service Provider shall perform any other operation and maintenance activities for the smooth operation of the field & installation pipelines, as advised by OIL representative.</p>	<ul style="list-style-type: none"> Tools and equipments required for the job shall be provided by Service Provider except the Piping materials. Service Provider shall arrange for all type of weldings by themselves. All types of requirement for weldings like Welding machine with mobile diesel generator set, Gas cutting set with all the accessories and grinding machine, Consumables shall be in Service Provider scope. The Service Provider should ensure to carry out the welding, cutting and grinding jobs through qualified/experienced manpower as per API-1104, AWS D10.4- 86 and ASME-B-31.3 and IBR qualified welder for welding in boilers, piping, pressure parts under IBR. For Steam Pipelines the Service Provider should ensure re-insulation of the pipelines after welding or any other repair jobs.
4.	Optional Services: Baghewala Oil fields (besides the two wells with steam set-up) Consisting of oil wells with well head equipments and fittings, Sucker Rod pump, DG set, Crude oil Storage tanks,	<ul style="list-style-type: none"> Monitoring of wells on daily basis. Recording of various well head parameters on daily basis. Scheduled maintenance of well head valves & fittings. Replacement of well head valves and fittings, if required, closing/opening of 	<ul style="list-style-type: none"> The jobs will be performed as per OIL requirement and instruction of OIL's site-in-charge. The jobs shall generally be carried out by OIL directly through its own infrastructure and manpower. However, Contractor may be asked to engage

SL No	Asset	Job description	Remarks
	Flow lines, Well Head fence etc.	<p>wells as per OIL's site-in-charge instruction.</p> <ul style="list-style-type: none"> • Operation & maintenance of complete Sucker Rod Pump set-up, Running-in & Running-out of the rod & pump as per OIL instruction. • To associate with well commissioning & work over & Drilling operations of the wells as and when required. • O & M of the diesel generators. • O & M of all the mechanical equipment and machineries. • Any other jobs pertaining to O & M of the wells. 	<p>their manpower and facilities for any exigencies occurred.</p> <ul style="list-style-type: none"> • Tools and equipments required for the job shall be provided by Company at free of cost.

10.0 MANPOWER FOR O&M

- i)** All personnel deployed by the Service Provider must have adequate experience in their respective field as stated para (vi) below. The Service Provider shall provide details of experience, qualification and other relevant data of the personnel to be deployed for scrutiny and clearance by the Company before the actual deployment. The Service Provider shall have to deploy the aforesaid persons after being certified and cleared by the Company only for the period of the Agreement. For any change of the appointed personnel due to extraordinary situation, the Service Provider may do so after being permitted and approved by the Company. On Company's advice, the Service Provider shall remove and replace, at their expense, any of their personnel whose presence is considered unsatisfactory in the opinion of the Company. However, the new recruitment shall take over the responsibility prior to their release of the concerned personnel.
- ii)** The workforce has to be engaged with proper uniform i.e. cotton overall for every personnel clearly mentioning the contractor name in the front side & back side, personnel name & blood group. The workforce should be provided with proper PPE i.e. good quality safety shoe, helmet, goggles, hand gloves, ear plug etc.
- iii)** The Service Provider shall nominate one of their personnel as **Field Manager** who shall be in charge of the Service Provider's personnel and who shall have full authority to resolve all day to day matters which may arise at the site.
- iv)** All persons deployed by the contractor under this contract must undergo Mines Vocational Training (MVT), Initial Medical Examination (IME) and Periodic Medical Examination (PME). They should be issued cards stating the name of the contractor and the work and its validity period, indicating status of MVT, IME and PME.
- v)** The minimum requirement of Key Personnel at any point of time during the contractual period shall be as follows:

Sl. No.	Personnel	No. of Key Persons to be deployed at any time during the Contract	Job Profile
1.0	Field Manger	01 (General Shift, shall be available for 24 Hrs.)	Single point of contact for the OIL management for O&M activities. Provide report to the OIL authority daily, fortnightly basis and also help out with the supervision activity in running the field operation.
2.0	1st Class Boiler Attendant-cum-Production in-charge	02 (12 hour shift, shall be available for 24 Hrs.)	Responsible for operation & maintenance of boilers, operation & maintenance of the WTP, operation & maintenance of the installations. Work closely with the Field Manager.

Sl. No.	Personnel	No. of Key Persons to be deployed at any time during the Contract	Job Profile
3.0	2nd Class Boiler Attendant-cum-Production Operator	02 (12 hour shift, shall be available for 24 Hrs.)	Responsible for assisting 1st Class Boiler Attendant in operation & maintenance of boilers, operation & maintenance of the WTP, operation & maintenance of the installations. Shall report to the 1st Class Boiler Attendant / Production in-charge.
4.0	Mechanical Technician	02 (12 hour shift, shall be available for 24 Hrs.)	For taking care of Mechanical Maintenance. Shall report to the 1st Class Boiler Attendant / Production in-charge.
5.0	Instrument Technician	01 (General shift, shall be available for 24 Hrs.)	For taking care of Instrumentation Maintenance. Shall report to the 1st Class Boiler Attendant / Production in-charge.
6.0	Electrical Technician-cum-DG operator	04 (12 hour shift, shall be available for 24 Hrs.)	For taking care of Electrical & DG Sets Operation & Maintenance. Shall report to the 1st Class Boiler Attendant / Production in-charge.
7.0	Assistant Fire Operator	02 (12 hour shift, shall be available for 24 Hrs.)	For taking care of Fire equipments. Shall report to the 1st Class Boiler Attendant / Production in-charge.
8.0	Production Attendant	02 (12 hour shift, shall be available for 24 Hrs.)	Responsible for operating & maintaining the wells and well head equipments i.e. sucker rod pumps etc. and other production activities. Shall report to the 1st Class Boiler Attendant / Production in-charge.
9.0	Semi Skilled Helper	02 (12 hour shift, shall be available for 24 Hrs.)	Help every sections in carrying out the jobs.

Sl. No.	Personnel	No. of Key Persons to be deployed at any time during the Contract	Job Profile
OPTIONAL:			
10.0	Production Attendant	As per OIL requirement	Responsible for operating & maintaining the wells & well head equipments i.e. sucker rod pumps etc. and other production activities for additional wells of Baghewala Oil fields (Besides the 2 nos. of wells with boiler setup).
11.0	Fire Operator	02 (12 hour shift, shall be available for 24 Hrs.)	Responsible for Fire Fighting operation and maintenance of Fire tender and all other fire fighting equipments deployed at OIL Baghewala Site.
12.0	Assistant Fire Operator	02 (12 hour shift, shall be available for 24 Hrs.)	Responsible for operation & maintenance of all Fire Fighting equipments deployed at OIL Baghewala Site.

CONTRACTOR personnel mentioned herewith are not intended as being fully exhaustive and as such CONTRACTOR shall depute any other personnel required for the compliance of COMPANY work intended considering 21 days on/off basis.

vi) Detailed qualification and Job profile of Key Personnel:

a) Field Manager:

The incumbent shall be an Engineering Graduate in Mechanical/Chemical/Instrumentation Engineering with minimum five (5) years of experience in the operation and maintenance of boilers, oil/gas production installations and fields. Alternately, he may be a science graduate with PCM or Diploma in Mechanical/ Chemical/ Instrumentation Engineering and having at least ten (10) years' experience in operation and maintenance of boilers, oil/gas production installations and fields. He shall have overall responsibilities for entire operational/ maintenance and administrative activities of the installations and establishment. The person shall be fully conversant with the operation and maintenance activities of fully automatic boilers, water treatment plants, gas/oil separators, SCADA operation, computer operation etc. He shall also be conversant with Oil & Gas Mines Safety Rules & Regulations, Indian Boiler Regulations. He shall be in constant touch with Company representative stationed at site and also at Jodhpur. The Field Manager shall normally attend general shift duty but shall be available for 24 hours. He shall also have sufficient knowledge of operation and maintenance of generating sets, different pumps/ motors, etc. Additionally, he must have adequate experience and

managerial skill to lead a multidisciplinary team to carry out day to day field job. He must be fluent in both English and Hindi (Read-Write-Speak).

b) 1st Class Boiler Attendant-cum-Production in-charge:

The person shall be responsible for all operation and maintenance activities of the boilers, plant & well site installation. The person shall 1st class Boiler Attendant Certificate holder with minimum three (3) years of experience in the operation and maintenance of equivalent capacity of automatic boilers. The person shall be fully conversant with the operation & maintenance activities of gas/oil separators, various control loops of the processing plant, computer operation etc. He shall also be conversant with Oil & Gas Mines Safety Rules and Regulations, Indian Boiler Regulations etc. He shall be in shift duty and shall be available for 24 hrs. He shall report to Field Manager for all activities related to the installations. He must be fluent in both English and Hindi (Read-Write-Speak).

c) 2nd Class Boiler Attendant-cum-Production Operator:

The person shall be responsible for all operation and maintenance activities of the boilers, plant & well site installation. The person shall 2nd class Boiler Attendant Certificate holder with minimum three (3) years of experience in the operation and maintenance of automatic boilers. The person shall be fully conversant with the operation & maintenance activities of gas/oil separators, various control loops of the processing plant, computer operation etc. He shall also be conversant with Oil & Gas Mines Safety Rules and Regulations, Indian Boiler Regulations etc. He shall be in shift duty and shall be available for 24 hrs. He shall report to 1st Class Boiler Attendant for all activities related to the installations. He must be fluent in both English and Hindi (Read-Write-Speak).

d) Instrument Technician:

The Instrument Technician shall be a Diploma holder in Instrumentation / Electronics with specialization in instrumentation and having adequate knowledge in computer application and with a minimum experience of 3 years or ITI certificate holder in instrumentation/electronics having adequate knowledge in computer application with a minimum of 5 years experience in use of various test equipments, calibration and servicing of electronic and pneumatic instruments, maintenance of PLC/SCADA/DCS. The Instrument Technician shall normally attend general shift duty but shall be available for 24 hours.

e) Mechanical Technician:

The Mechanical Technician shall be a Diploma holder in Mechanical with a minimum experience of 3 years or ITI certificate holder in mechanical having with a minimum of 5 years' experience in maintenance of various rotating equipments, DG sets, vessels, pipelines etc. He shall be conversant in plumbing jobs also. The Mechanical Technician shall be in shift duty and shall be available for 24 hrs.

f) Electrical Technician-cum-DG operator:

The Electrical Technician shall be a Diploma holder in Electrical with a minimum experience of 3 years or ITI certificate holder in Electrical having with a minimum of 5 years' experience in maintenance of operation and maintenance of DG sets' alternators, Electrical distribution system, related control panels MCC panels, Air conditioners, various motors etc. The Electrical Technician cum DG Operator shall be in shift duty and shall be available for 24 hrs.

Electrical Technician shall have valid electrician license.

g) Assistant Fire Operator:

The Fire Operator shall be Metric with certificate course from State Fire Service / Civil / Defence/ any recognized institute with 2 years' experience in fire service.

h) Production Attendant:

The Production attendant should have minimum 1-year experience as Rigger in any oil & gas or other heavy industries.

i) Fire Operator:

The Fire Operator shall be Metric with HD Vehicle driving license. He should have minimum 2 years' experience in fire service.

The Jobs required to be executed by the above personnel is not exhaustive. The personnel should be ready to help other personnel in carrying out any operational jobs.

Job profile of required personnel are summarized in Annexure-A

The details of Key Personnel are to be filled by the bidder in Table – I of Annexure-A

vii) The Bio-data and experience of the personnel has to be produced for our scrutiny before deploying them for the job. The workforce has to be engaged with proper uniform as prevailing in the fire service department in India.

NOTE: - Manpower indicated in **Annexure-A** is minimum requirement. However, the Service Provider should arrange additional manpower on his own cost on temporary basis for execution of special jobs, if any, during the Agreement period.

viii) The manpower as mentioned in enclosed **Annexure-A** are to be engaged for operation and maintenance jobs should have requisite experience as per **Annexure-A** to handle various equipments viz. Boilers, Diesel Generating Sets of various capacities, various centrifugal pumps, water treatment plant, pipe and pipe fittings jobs etc.

11.0 BRIEF INFORMATION OF THE FIELD DATA:

Following are the preliminary information of the field:

S No	PARAMETERS	VALUES
1	Liquid Composition (Combined)	Oil: 100% Water: Minor Quantity Gas: NIL
2	Location of the field, installation and wells	As per Annexure-I (Fig-1, 2 & 3)
3	A general diagram of the Well Site/ Production Surface Set-up	As per Annexure-II (Fig-4 & 5)

12.0 GENERAL OBLIGATIONS OF CONTRACTOR:

Contractor shall, in accordance with and subject to the terms and conditions of the Contract:

12.1 Perform the work described in the Scope of Work/ Terms of Reference in most economic and cost effective manner accepted in accordance with international oilfield practice.

12.2 Contractor shall arrange transportation of their manpower, materials and equipment/tools/spares/consumables as may be necessary for execution of the assigned jobs from their base to Company's site at Baghewala in Jaisalmer (Rajasthan) and will take back after job completion at their own expenses.

12.3 Contractor shall keep their equipment in good working order and shall begin the work with sufficient spares for full and proper performance. Execution of site job should not be hampered at any point of time for non-availability of manpower, materials or for shutdown/malfunctioning of equipment.

12.4 Contractor shall furnish full particulars of crews to Company and issue photo identity cards to each crew members before actual deployment at site.

12.5 Contractor shall bear all expenses on account of repair/replacement of all their equipment etc., consequent upon any damage/loss/non-performance during the course of operation.

12.6 Contractor shall be bound by laws and regulations of Government of India and other statutory bodies of India. Contractor shall follow its own safety rules, in addition to rules prescribed under Indian laws in respect of safety, security restrictions, work permits & customs etc. as applicable.

12.7 Contractor shall bear all costs for transportation of their equipment and other materials including the insurance premium etc.

12.8 Perform all other obligations, work and services which are required by the terms of this contract or which reasonably can be implied from such terms as being necessary for the successful and timely completion of the work.

12.9 Contractor shall be deemed to have satisfied himself before submitting his bid as to the correctness and sufficiency of its bid for the services required and of the rates and prices quoted, which rates and prices shall, except in so far as otherwise provided, cover all its obligations under the contract.

12.10 Contractor shall provide additional manpower for Operation & Maintenance OIL's Baghewala site as mentioned in the price schedule format-II. Company will inform the Contractor whenever requirement arises by written intimation. Contractor will mobilise & place the requisite manpower within 10 days of intimation. Liquidated Damages will be applicable if the Contractor fails to do so.

12.11 Contractor shall arrange drinking water facility at both the installations mentioned in Sl. No. 1 & 2 of **9.7: DEFINITION OF WORK FOR O&M** for OIL & Contractor personnel.

13.0 GENERAL OBLIGATIONS OF THE COMPANY:

Company shall, in accordance with and subject to the terms and conditions of the contract:

13.1 Pay Contractor in accordance with terms and conditions of the contract.

13.2 Perform all other obligations of the Company required by the terms of the contract.

14.0 PERSONNEL TO BE DEPLOYED BY THE CONTRACTOR:

14.1 Contractor warrants that it shall provide competent, qualified and sufficiently experienced personnel to perform the work correctly and efficiently within the stipulated time frame.

14.2 The Contractor should ensure that their personnel observe applicable company and statutory safety requirement. Upon Company's written request, contractor, entirely at its own expense, shall remove immediately, any personnel of the Contractor determined by the Company to be unsuitable and shall promptly replace such personnel with personnel acceptable to the Company.

14.3 The Contractor shall be solely responsible throughout the period of the contract for providing all requirements of their personnel including but not limited, their transportation to & fro from their base upto the site, enroute/local boarding, lodging & medical attention etc. Company shall have no responsibility or liability in this regard.

14.4 Contractor warrants that it shall perform the work in a professional manner and in accordance with the highest degree of quality, efficiency and with the state of the art technology/ inspection services and in conformity with all specifications, standards and drawings set forth or referred to in the Technical Specifications, if any. They should comply with the instructions and guidance which Company may give to the Contractor from time to time.

14.5 OIL shall reserve the right to utilize the services under this Agreement within the OIL's operational area in Baghewala heavy oil field.

ANNEXURE-I: Location of Field, Installation & wells



Fig. 1: Location of Fields

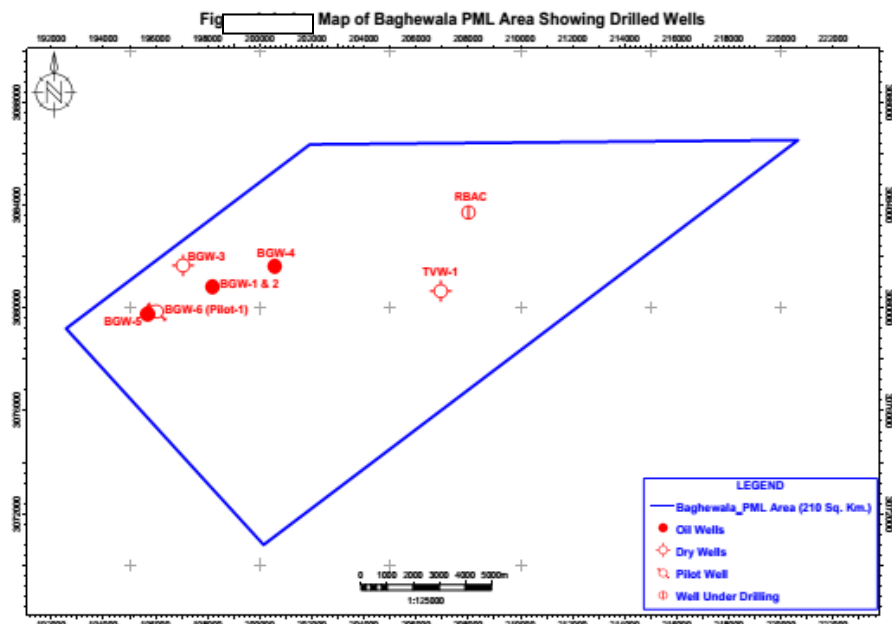


Fig.2: Location of drilled wells & Surface Set-up (Pilot-1 in the map)

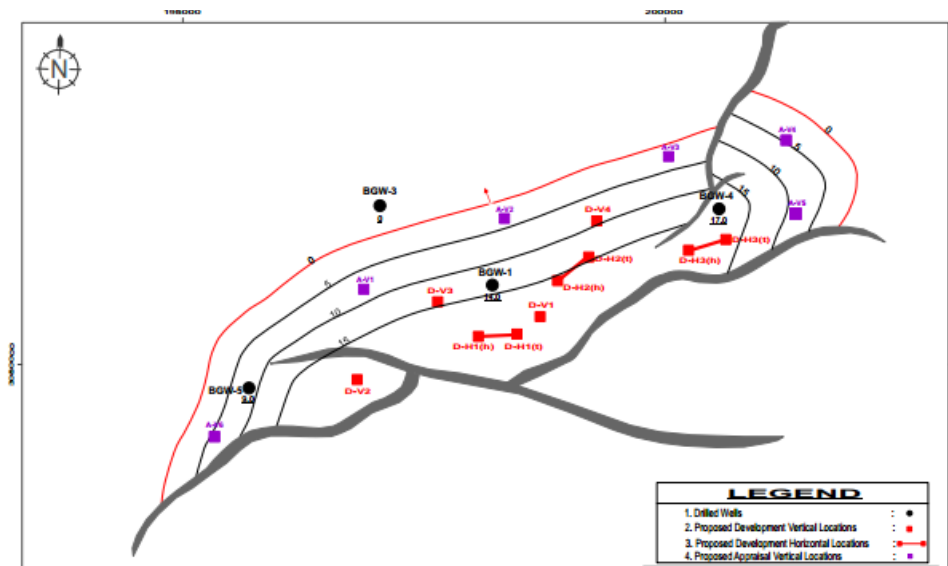


Fig. 3: Location of wells to be drilled

(Loc. D-H2 & Loc. D-V4 is the location of the Boiler Set-Up)

ANNEXURE: II: General Diagram of Well Site & Production Surface set-up (The diagram is for illustration purpose only, actual may change in field)

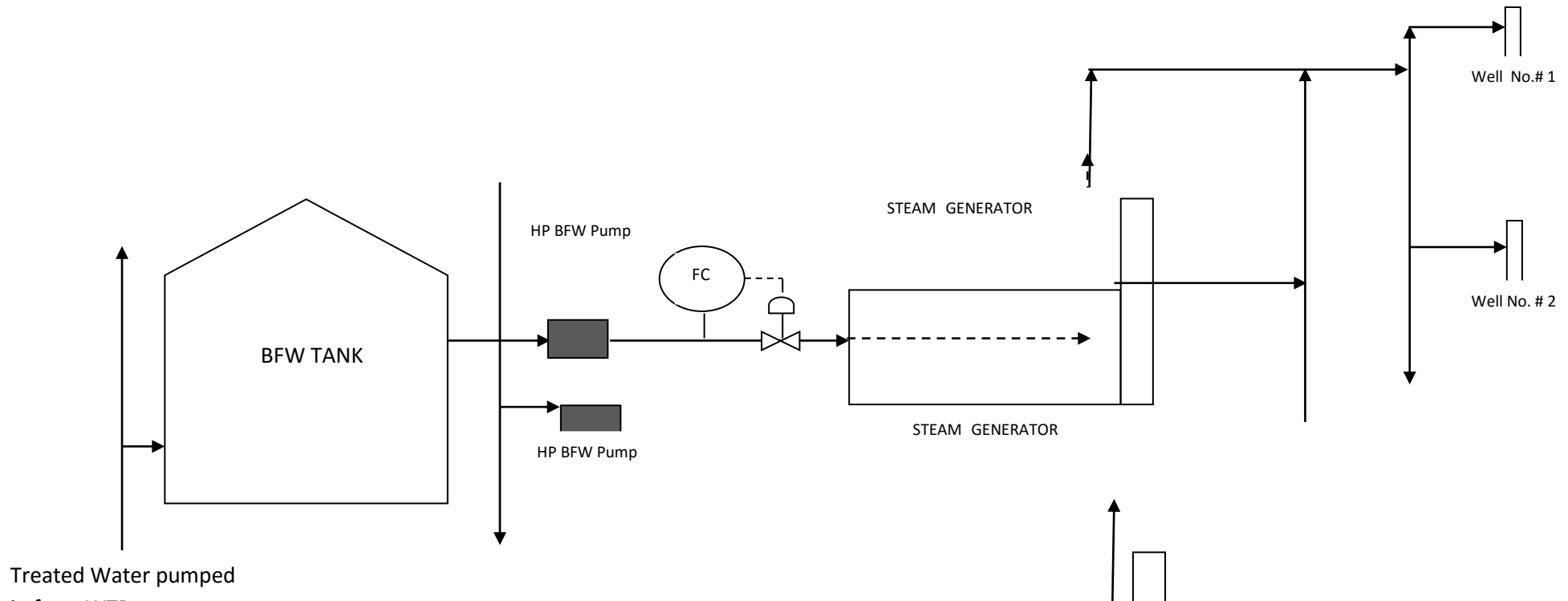
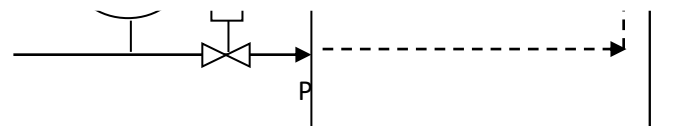


Fig. 4: General Well Pad Steam Generation Process Flow Diagram



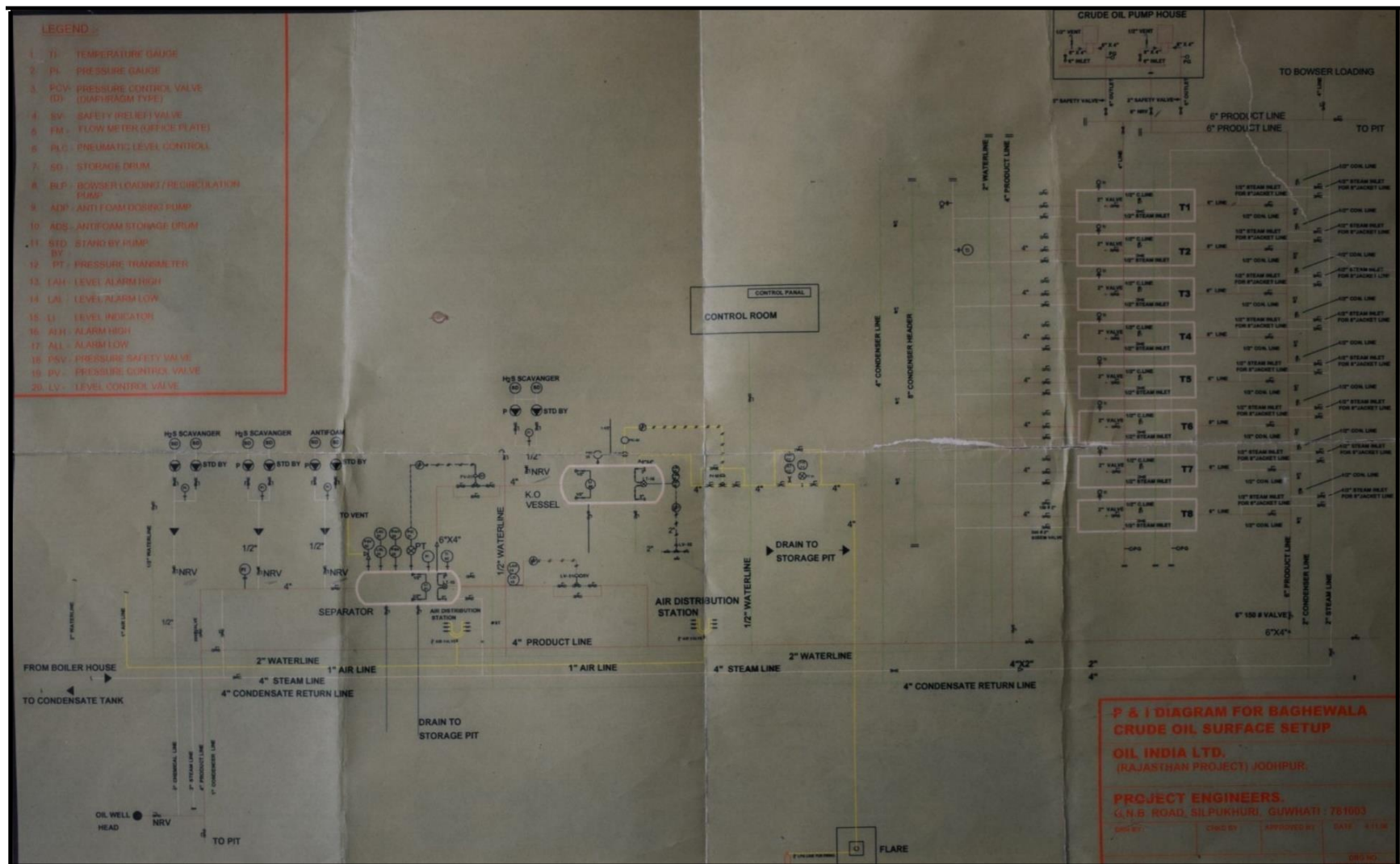


Fig. 5: Production Surface Set-up (General Process Flow Diagram)

KEY PERSONNEL FOR O&M

S/ N	DESIGNATION/ QUALIFICATION	QTY	JOB/RESPONSIBILITIES	DEPLOYMENT
1.	Field Manager - BE in Mechanical/ Chemical/ Instrumentation Engineering with minimum 5 years of Experience or BSc/Diploma in Mechanical/ Chemical/ Instrumentation Engineering with 10 years of Experience	1+1	The incumbent shall be an Engineering Graduate in Mechanical/Chemical/Instrumentation Engineering with minimum five (5) years of experience in the operation and maintenance of boilers, oil/gas production installations and fields. Alternately, he may be a science graduate with PCM or Diploma in Mechanical/ Chemical/ Instrumentation Engineering and having at least ten (10) years experience in operation and maintenance of boilers, oil/gas production installations and fields. He shall have overall responsibilities for entire operational/ maintenance and administrative activities of the installations and establishment. The person shall be fully conversant with the operation and maintenance activities of fully automatic boilers, water treatment plants, gas/oil separators, SCADA operation, computer operation etc. He shall also be conversant with Oil & Gas Mines Safety Rules & Regulations, Indian Boiler Regulations. He shall be in constant touch with Company representative stationed at site and also at Jodhpur. The Field Manager shall normally attend general shift duty but shall be available for 24 hours. He shall also have sufficient knowledge of operation and maintenance of generating sets, different pumps/ motors, etc. Additionally, he must have adequate experience and managerial skill to lead a multidisciplinary team to carry out day to day field job. He must be fluent in both English and Hindi (Read-Write-Speak).	General Shift (21 days on-off schedule) and should be available 24 hrs.

S/ N	DESIGNATION/ QUALIFICATION	QTY	JOB/RESPONSIBILITIES	DEPLOYMENT
2.	1st Class Boiler Attendant-cum-Production in-charge - The person shall be 1st class Boiler Attendant Certificate holder with minimum three (3) years of experience	2+2	The person shall be responsible for all operation and maintenance activities of the installations related to steam, crude oil production and supply. The person shall be responsible for all operation and maintenance activities of the boilers, plant & well site installations. The person shall 1st class Boiler Attendant Certificate holder with minimum three (3) years of experience in the operation and maintenance of equivalent capacity of automatic boilers. The person shall be fully conversant with the operation & maintenance activities of gas/oil separators, various control loops of the processing plant, computer operation etc. He shall also be conversant with Oil & Gas Mines Safety Rules and Regulations, Indian Boiler Regulations etc. He shall be in shift duty and shall be available for 24 hrs. He shall report to Field Manager for all activities related to the installations. He must be fluent in both English and Hindi (Read-Write-Speak).	12 hrs shift duty (21 days on-off schedule)
3	2nd Class Boiler Attendant-cum-Production Operator - The person shall be 2nd class Boiler Attendant Certificate holder with minimum three (3) years of experience	2+2	The person shall be responsible for all operation and maintenance activities of the boilers, plant & well site installation. The person shall 2nd class Boiler Attendant Certificate holder with minimum three (3) years of experience in the operation and maintenance of of automatic boilers. The person shall be fully conversant with the operation & maintenance activities of gas/oil separators, various control loops of the processing plant, computer operation etc. He shall also be conversant with Oil & Gas Mines Safety Rules and Regulations, Indian Boiler Regulations etc. He shall be in shift duty and shall be available for 24 hrs. He shall report to 1st Class Boiler Attendant for all activities related to the installations. He must be fluent in both English and Hindi (Read-Write-Speak)	12 hrs shift duty (21 days on-off schedule)

S/ N	DESIGNATION/ QUALIFICATION	QTY	JOB/RESPONSIBILITIES	DEPLOYMENT
4.	Instrument Technician – Diploma in Instrumentation/ Electronics with 3 years exp or ITI Certificate in Instrumentation/ Electronics with 5 years exp	1+1	The Instrument Technician shall be a Diploma holder in Instrumentation / Electronics with specialization in instrumentation and having adequate knowledge in computer application and with a minimum experience of 3 years or ITI certificate holder in instrumentation/ electronics having adequate knowledge in computer application with a minimum of 5 years experience in use of various test equipments, calibration and servicing of electronic and pneumatic instruments, maintenance of PLC/SCADA/DCS. The Instrument Technician shall normally attend general shift duty but shall be available for 24 hours.	General Shift (21 days on-off schedule) and should be available 24 hrs.
5.	Mechanical Technician - Diploma in Mechanical with 3 years experience or ITI with 5 years experience	2+2	The Mechanical Technician shall be a Diploma holder in Mechanical with a minimum experience of 3 years or ITI certificate holder in mechanical having with a minimum of 5 years experience in maintenance of various rotating equipments, DG sets, vessels, pipelines etc. The Mechanical Technician shall be in shift duty and shall be available for 24 hrs.	12 hrs shift duty (21 days on-off schedule)
6.	Electrician-cum-DG Set Operator - Diploma in Electrical with 3 years experience or ITI with 5 years experience	4+4	The Electrical Technician shall be a Diploma holder in Electrical with a minimum experience of 3 years or ITI certificate holder in Electrical having with a minimum of 5 years experience in maintenance of operation and maintenance of DG set's alternators, Electrical distribution system, related control panels MCC panels, Air conditioners, various motors etc. The Electrical Technician cum DG Operator shall be in shift duty and shall be available for 24 hrs. Electrical Technician shall have valid electrician license.	12 hrs shift duty (21 days on-off schedule)
7.	Assistant Fire Operator - Metric with certificate course from State Fire Service / Civil / Defence/ any recognized institute with 2 years experience in fire service	2+2	Responsible for Fire Fighting Operation, Operation & maintenance of all fire fighting equipments	12 hrs shift duty (21 days on-off schedule)
8.	Production Attendant	2+2	A Production Attendant has to be deputed for helping in well operations and other production operation. The Production	12 hrs shift duty (21 days on-off

S/ N	DESIGNATION/ QUALIFICATION	QTY	JOB/RESPONSIBILITIES	DEPLOYMENT
			Attendant shall have sound experience as a rigger in Oil & Gas industry.	schedule)
9.	Semi Skilled Helper	2+2	A helper has to be deputed for helping others	12 hours shift (21 days on-off schedule) duty
OPTIONAL				
10.	Production Attendant	As per OIL requirement	A Production Attendant has to be deputed for helping in well operations and other production operation. The Production Attendant shall have sound experience as a rigger in Oil & Gas industry.	
11.	Fire Operator , Metric with HD vehicle driving license with 2 years experience in fire service	2+2	Responsible for Fire Fighting Operation, operation & maintenance of Fire Tender and all other fire fighting equipments	12 hours shift (21 days on-off schedule) duty
12.	Assistant Fire Operator , Metric with certificate course from State Fire Service / Civil / Defence/ any recognized institute with 2 years experience in fire service	2+2	Responsible for Fire Fighting Operation, Operation & maintenance of all fire fighting equipments	12 hrs shift duty (21 days on-off schedule)

NOTE:

1. As per job requirements the Service Provider will have to provide adequate manpower with necessary tools and equipment for smooth operation and maintenance of plant and equipment. For jobs of housing/industrial maintenance, Service Provider may engage temporary staff as and when required.
2. It will be the responsibility of the Service Provider to provide safety gears, proper tools and equipment to the working staff.
3. Support service staff for Sanitation etc. is to be provided as per the discretion of the service provider without hampering the company job requirements.
4. The bidder shall provide the list of the personnel proposed as per **TABLE-I** below. Documentary evidence shall provide prior deployment.

TABLE-I:

Sl. No.	Name	Position	Qualification and Experience

Annexure - B

EQUIPMENT LIST FOR PART-A OF THE CONTRACT

List of equipment required which are included in the Scope of Work of the Contract is given in this section. This is a general list and not exhaustive.

S.N.	DESCRIPTION	SPECIFICATION
SEPARATOR/VESSEL		
1	Gas/Oil Separator (V-01)	DP: 5.0 Kg/Cm2, DT:110 degC
2	Knock Out Vessel (V-02)	DP: 3.2Kg/Cm2, DT:110 degC
3	Rectangular Tank- 8 nos.	Capacity: 37.37 KLS
PUMPS		
4	H2S Scavenger Pump- 6 nos.	Motor Driven Centrifugal Pump Motor Rating: 0.37 KW
5	Antifoam Dosing Pump- 2 nos.	Motor Driven Centrifugal Pump Motor Rating: 0.37 KW
6	Bowser Loading Pump- 2 nos.	Motor Driven Centrifugal Pump Motor Rating: 18.5 KW
7	Diesel Pump	Motor Driven Centrifugal Pump Motor Rating:0.55 KW
8	Fire Water Pump with Panel- 1 no.	Engine Driven Centrifugal Pump Rated KW/HP: 93.5/127, Pump Head: 85 Mtrs.
9	Jockey Fire Water Pump- 1 no.	Motor Driven Centrifugal Pump Motor Rating: 7.5 KW
ELECTRICAL EQUIPMENTS		
10	Motor Control Centre (MCC)	415 V, 3 ph
11	Online UPS with batteries- 2 nos.	5 KVA, Make: Kaveri
12	H2S Scavenger Pump- 6 nos.	1 ph 0.33 KW
13	Antifoam Dosing Pump- 2 nos.	1 ph 0.33 KW
14	Crude Oil Bowser Loading Pump- 2 nos.	
15	Diesel Pump- 1 no.	1 ph 0.55 KW, Make: Crompton Greaves
16	Jockey Fire Water Motor- 1 no.	3 ph 7.5 KW
17	Window Air Conditioner - 6 nos.	1.5 T, Make: Samsung
18	Street Light with Tubular Pole - 7 nos.	
19	Flameproof Local Control Station for motors - 11 nos.	
20	Switch Board of different sizes- 35 nos.	
21	Electrical fittings like Bulbs, tubes, sockets, exhaust fans, light fixtures, Distribution Boards etc.	
INSTRUMENTATION EQUIPMENTS		
22	a) Pressure Gauges b) Temperature Gauge c) Level Gauges d) Pressure Switch	Make: H. GURU/Switzer/others
23	Electronic Transmitters: a) Diaphragm Sealed Pressure Transmitter- 2 nos. b) DP Transmitter with orifice- 1 no. c) DP Transmitter with Sealed Diaphragm-2 nos.	Make: Yokogawa/Others

S.N.	DESCRIPTION	SPECIFICATION
	d) RTD Temperature Transmitter - 1 no.	
24	Electronic Dual PID Controller- 8 no. Dual Bar Graph Indicator- 1 no. Totaliser- 1 no.	Make: Yokogawa Make: Masibus Make: Prantech
25	Electronic Alarm Annunciator- 1 no.	Make: Procon
26	Instrumentation Control Panel containing Signal Distributors, Isolators etc. - 1 no.	Make of Signal Distributor/Isolator-MTL
27	Control Valve with accessories - 3 nos.	<p>a) LV-01/LV-02: Make: Instrumentation Limited Model: VSC-VA 2R Size: 3"×1.5', Lift: 37.5 mm Rating: ANSI 150 RF Body: A 216 WCB TRIM: SS 316 ST, Cv: 24 Characteristics: Linear, Packing: V-Teflon, Gasket- V 543 V 595 Air to Open Control Valve: Globe Type</p> <p>b) PV-01/PV-02: Make: Instrumentation Limited Model: VSC-VA 2D Size: 4", Lift: 37.5 mm Rating: ANSI 150 RF Body: A 216 WCB TRIM: SS 316 ST, Cv: 175 Characteristics: EQ%, Packing: V-Teflon, Gasket- V 543 V 595 Air to Close Control Valve: Globe Type</p>
28	Safety Relief Valve - 2 nos.	<p>a) Type: 2511E-CN-001 Size: 1"×150×2"×150 ANSI RF MOC: Body/Bonnet-A 216 WCB Spring-CAD.PL.CS Nozzle: SS 316 ST Set Pr. 2.2 kg/cm², B.P.:ATM Temp.: 85 degC, C. Set: 2.2 kg/cm² Make: Instrumentation Limited</p> <p>b) Type: 2511F-CN001 Size: 1.5"×150×2"×150 ANSI RF MOC: Body/Bonnet-A 216 WCB Spring-CAD.PL.CS Nozzle: SS 316 ST Set Pr. 6.0 kg/cm², B.P.: ATM Temp.: 85 degC, C. Set: 6.0 kg/cm² Make: Instrumentation Limited</p>
PIPELINES & MISCELLANEOUS		
29	Steam Pipeline- 4 inch/2 inch/½ inch	Length: Approx. 500 Mtr
30	Condensate Pipeline 4 inch	Length: Approx. 200 Mtr.
31	Product Pipeline- 4 inch/6 inch	Length: Approx. 300 Mtr.

S.N.	DESCRIPTION	SPECIFICATION
32	Gas Pipeline- 4 inch	Length: Approx. 200 Mtr.
33	Water Pipeline - 2 inch/ ½ inch	Length: Approx. 300 Mtr.
34	Fire Water Line	Length: Approx. 500 Mtr.
35	Air line - 1 inch/ ½ inch	Length: Approx. 300 Mtr.
36	Steam Trap, CS Strainer/Bucket type	11 Nos.
37	Hand Wheel Gate Valves/ Hand Wheel Ball Valves/NRVs/Safety Valves of different sizes: 70 nos.	Make: Lacier/Others
38	Flare Stack	Height: 10 meter

EQUIPMENT LIST FOR PART-B OF THE CONTRACT

List of some major equipments presently available at Installations and which are included in the Scope of Work of the contract is given in this section. This is a general list and not exhaustive. The list is subject to revision with deletion/ addition of the items other than the following. Moreover, OIL reserves the right to replace any existing equipment/machine as listed in with new / similar equipment/machine and in such cases all terms and conditions for O & M shall apply to the replaced equipments/machines.

I) Boiler Set-up:

A) Rating of Electrical Equipments of HP Boilers- 2 Sets:

Make: Thermax,
Type: Coil Type Once Through Steam Generator,
DP:176 Kg/Cm²,
Capacity: 8333 kg/hr,
Fuel: LDO
PLC/SCADA: Siemens

Sl. No.	Description	Rating	Qty.
1	Feed Water Pump	75 KW (S/D)	2 (1 W+ 1 S)
2	Make Up Water Pump	0.55 KW (DOL)	1
3	Burner F.D. Fan	15 KW (DOL)	1
4	Burner Oil Pump	2.2 KW (DOL)	1
5	Oilon Burner	KP-600M, RF 20	1
6	Boiler Panel	----	1

B) Rating of Electrical Equipments of MP Boilers- 2 Sets:

Make: Thermax,
Type: Shell Tube Boiler,
DP:12Kg/Cm²,
Capacity: 2000 kg/hr,
Fuel: LDO/Gas
PLC/SCADA: Siemens

Sl. No.	Description	Rating	Qty.
1	Feed Water Pump	2.2 KW	2 (1 W+ 1 S)
2	Fuel Pump	1.5 KW	1
3	Combustion Blower	4 KW	1
4	LP Dosing Pump	0.37 KW	2 (1 W +1 S)

5	LP Dosing Agitator	0.37 KW	1
6	Oilon Burner	GKP-140M	1
7	Boiler Panel	---	1
8	1 KVA UPS	---	1

C) Water Treatment System (Softening + Dosing)- 2 sets each:

Make: Thermax

Service Flow Rate: 11 m3/hr,

Service Cycle: 20 Hrs.,

Output Between Regeneration: 220 m3

Sl. No.	Description	Rating/ Capacity	Qty.
1	Raw Water Pump	3 KW (DOL)	2
2	Dual Media Filter + Softener		1
3	NAOCL Dosing Pump	0.08 KW (1 PH)	2
4	Brine Tank Agitator	0.37 KW (DOL)	1
5	SMBS Dosing Pump	0.08 KW (1 PH)	2
6	SMBS Dosing Tank Agitator	0.08 KW (1 PH)	1
7	Alkali Dosing Pump	0.08 KW (1 PH)	2
8	LP Dosing Pump	0.08 KW (1 PH)	2
9	LP Dosing Tank Agitator	0.08 KW (1 PH)	1
10	Control Panel for Softener Skid	0.03 KW	1
11	Dosing Tank	200 LTR	4
12	Overhead Water Tank	20 KL	2

D) Air Compressor & Drier Unit- 2 nos.

Compressed Air Drying Package- 2 nos.

Make: Drytech Engineers

Model: ADP V

Capacity: 6 CFM

Air Compressor Motor Rating: 1.5 KW (DOL)

Air Drier Motor Rating: 0.08 KW (1 PH)

Air Receiver Capacity: 0.15 M3

E) Fuel Oil Circuit:

Sl. No.	Description	Rating	Qty.
1	Ring Main Pump	1.1 KW (DOL)	4
2	Diesel Dispenser Pump	0.55 KW	1
3	Overhead HSD Storage Tank	15 KLS	6
4	Underground HSD Storage Tank	20 KLS	1

II) Various Equipments & facilities of Well Site Set-up & Production Surface Set-up:

S.N.	DESCRIPTION	SPECIFICATION
SEPARATOR/VESSEL		
1	Gas/Oil Separator (V-01)-1 no.	DP: 5.0 Kg/Cm2, DT:110 degC
2	Knock Out Vessel (V-02)- 1 no.	DP: 3.2Kg/Cm2, DT:110 degC
3	Rectangular Tank- 8 nos.	Capacity: 37.37 KLS

S.N.	DESCRIPTION	SPECIFICATION
4	Crude Oil Storage Tank- 2 no.	Capacity: 160 KLS
5	Gas/ Oil Separator- 1 no.	DP: 300 psi, TP: 450 psi
PUMPS/ ELECTRICAL EQUIPMENTS		
6	H2S Scavenger Pump - 4 nos.	Motor Driven Centrifugal Pump Motor Rating: 0.37 KW, 1 Ph
7	Antifoam Dosing Pump - 4 nos.	Motor Driven Centrifugal Pump Motor Rating: 0.37 KW, 1 Ph
8	Bowser Loading/ Crude Dispatch Pump- 3 nos.	Motor Driven Centrifugal Pump Motor Rating: 18.5 KW, 3 Ph
9	Diesel Pump- 1 no.	Motor Driven Centrifugal Pump Motor Rating: 0.55 KW
10	Fire Water Pump with Panel - 1 no.	Engine Driven Centrifugal Pump Rated KW/HP: 93.5/127, Pump Head: 85 Mtrs.
11	Jockey Fire Water Pump - 1 no.	Motor Driven Centrifugal Pump Motor Rating: 7.5 KW
12	Treated Water Dispatch Pump - 2 nos.	Motor Driven Centrifugal Pump Motor Rating: 40 HP, 3 Ph
13	Sucker Rod Pump - 2 nos.	Motor Driven Centrifugal Pump Motor Rating: 40 HP, 3 Ph
14	Diesel Generator Set - 4 nos.	180 KVA/270 KVA/320 KVA
15	Window Air Conditioner - 6 nos.	1.5 T/ 2 T, Make: Samsung
16	Street Light with Tubular Pole	
17	Electrical fittings like Bulbs, tubes, sockets, exhaust fans, light fixtures, Distribution Boards, Switch boards etc.	
OTHER FACILITIES		
18	Flare Stack- 2 nos.	Height: 10 meter
19	Control Room at Surface Set-up	
20	Bunk Houses - 10 nos.	
21	Concrete Pond - 2 nos.	Water/ Crude
22	Drain Pit - 3 nos.	

SERVICE PART-1

Specification of the Materials:

A) Diaphragm Sealed Pressure Gauge with Screwed Connection (Sl. No.66):

I) Pressure Gauge End Specification:

1. Location: Outdoor field Mounted
2. Measuring Element: Bourdon
3. Measuring Element material: SS316
4. Movement material: SS304/SS316
5. Case material: Die cast aluminum/SS
6. Protection: IP65
7. Colour: White with black engraving
8. Dial size: 150 mm
9. Over range protection: 125% of range
10. Glass: Shatter proof
11. Blowout protection: To be provided
12. Accuracy: $\pm 1\%$ of full scale

II) Sealed Unit End Specification:

13. Process Temperature (Max.): 85 degC
14. Diaphragm material: SS316
15. Sealing Medium: Silicon Oil or Mercury
16. Top Chamber & Bottom Chamber: SS304/SS316
17. Process Connection: 1/2 inch NPT M bottom
18. Make: Baumer/Wika/H.Guru/Aschroft/Baumer or equivalent

B) Pressure Gauge (Sl. No. 67):

1. Range: 0-10 kg/cm²
2. Type: Direct, Mounting: Local
3. Dial Size: 150 mm, white
4. Case: Di-Cast Aluminium/SS
5. Windows: Shatterproof glass
6. Enclosure: Weatherproof, Class-IP65
7. Pressure Element: Bourdon, SS316
8. Bezel Ring: Screwed,
9. Socket: SS316
10. Accuracy: +/- 1% FSD,
11. Overrange protection: 125% of Range
12. Zero adjustment: Micrometer pointer
13. Connection: 1/2" NPT (M), Bottom,
14. Movement: SS316/SS314
15. Blowout protection: To be provided
16. Make: Baumer/Wika/H.Guru/Aschroft/Baumer or equivalent

C) Temperature Gauge (Filled Type) (For Sl. No. 68 & 69):

1. Service: Heavy Oil/Heavy Oil + Gas
2. Type: Filled Type-150 mm dial
3. Location: Field
4. Mounting: Line Mounted
5. Ambient Temperature: (-5)-55 degC
6. Relative Humidity: 0-95%, non condensing
7. Range: 0-150 degC
8. Extension Length: 150 mm
9. Immersion Length: 200 mm
10. Bulb Dia.: 1/2 inch
11. Case material: Die cast aluminium/SS
12. Sheath Material: SS316
13. Capillary: SS316-5 mtr.
14. Element connection to Thermowell: 3/4 inch
15. Process Connection: 1 inch NPTM
16. Thermowell: SS316 Threaded Bar
17. Standards for Thermowell: ASME PTC 19.3
18. Calibration Standard: As per DIN standard
19. Make: Wika/H.Guru/Aschroft/Baumer or equivalent

D) Temperature Gauge (Bimetal Type) (For Sl. No. 68 & 69):

1. Service: Heavy Oil/heavy Oil + Gas
2. Type: BIMETAL-150 mm dial
3. Location: Field
4. Mounting: Line Mounted

5. Ambient Temperature: (-5)-55 degC
6. Relative Humidity: 0-95%, non condensing
7. Measuring Range: 0-150 degC
8. Extension Length: 150 mm
9. Insertion Length: a) 200 mm - 6 nos. (Process Connection: 1 inch NPT M)
b) 400 mm - 4 nos. (Process Connection: 1 1/2 inch 150# RF)
10. Sheath Material: SS316
11. Case material: Die cast aluminium/SS
12. Element connection to Thermowell: 3/4"
13. Wetted parts of Thermowell: SS316
14. Standards for Thermowell: ASME PTC 19.3
15. Calibration Standard: As per DIN standard
16. Make: Baumer/Wika/H.Guru/Aschroft/Baumer or equivalent

E) Pressure Switch (For Sl. No. 70):

1. Type: Blind, Diaphragm seal type
2. Mounting: Local/flush
3. Media: Heavy oil + Gas/ Process Temperature (Max.): 85 degC
4. Sensing element: Diaphragm
5. Material element: SS316
6. Sealing: SS316 capillary of length 5 mtrs.
7. Case material: Die cast aluminium
8. Enclosure: IP-65, zone I Gr.-II B,C
9. Over range: 125% of max. pressure
10. Output: Potential free 2 NO/2NC SPDT
11. Power supply: 110 VDC 2A
12. Cable Entry: 1/2" NPTF
13. Accuracy: $\pm 1.0\%$
14. Repeatability: $\pm 0.5\%$ FSR
15. Process Connection: 3" ANSI 150# RF SS316
16. Make: Switzer or equivalent
17. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines Area
18. Standard accessories

F) Pressure Transmitter (For Sl. No. 71):

- a) General:
 1. Service: Heavy Oil / Heavy Oil + Gas
 2. Pressure Unit: kg/cm²
 3. Calibration range: 0-10 kg/cm²
 4. Pressure Maximum: 5.0 kg/cm²
 5. Operating Pressure: 3.0 kg/cm²
 6. Connection Type (HP): 3 " wafer type diaphragm ANSI 300#RF SS316
 7. Wetted Parts material: Diaphragm: SS316; Others: SS316
 8. Fill Fluid: Silicone Oil
 9. Capillary Length: 3 metre
 10. Capillary: SS316 with armoured
 11. Process Temperature (Max.): 85 degC
 12. Ambient Temperature: (-5)-55 degC
 13. Relative Humidity: 0-95%, non condensing
 14. Intrinsically Safe: Yes
 15. Lightning protection: Required

- b) Transmitter:

1. Type: Smart Type
2. Enclosure: NEMA-4 & IP-65
3. Enclosure Material: MFG Std.
4. Cable entry: 1/2" NPT F
5. Mounting: 2 inch Pipe
6. Power Supply: 24 VDC
7. Accuracy: $\pm 0.5\%$ of span
8. Output: 4-20 mA
9. Accessing Protocol: HART
10. Local Indicator: LCD
11. Span & Zero Adjustment: To be provided on the body
12. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines
13. Standard accessories

G) Level Transmitter (DP Type) (For Sl. No. 72):

a) General:

1. Service: Heavy Oil
2. Pressure Maximum: 5 kg/cm²
3. Operating Pressure: 3 kg/cm²
4. Connection Type (HP): 3" wafer type diaphragm ANSI 150#RF SS316
5. Measurement Span: 250 to 10000 mmH₂O
6. Wetted Parts Material: Diaphragm: SS316, Others: SS316
7. Fill Fluid: Silicone Oil
8. Capillary: SS316 with armoured
9. Capillary length: 3 metre
10. Process Temperature (Max.): 85 degC
11. Ambient Temperature: (-5)-55 degC
12. Relative Humidity: 0-95%, non condensing
13. Intrinsically Safe: Yes
14. Lightning protection: Required

b) Transmitter:

1. Type: Smart Type
2. Enclosure: NEMA-4 & IP-65/ Zone 1 Gr. IIB & C
3. Enclosure Material: MFG Std.
4. Cable entry: 1/2" NPT F
5. Mounting: 2 inch Pipe
6. Power Supply: 24 VDC
7. Accuracy: $\pm 1\%$ of calibrated span
8. Output: 4-20 mA
9. Accessing Protocol: HART
10. Local Indicator: LCD
11. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines
12. Standard accessories

H) Differential Pressure Transmitter (For Sl. No. 73):

a) General:

1. Service: Gas
2. Maximum Working Pressure: 5 kg/cm²
3. Process Temperature (Max.): 85 degC
4. Ambient Temperature: (-5)-55 degC
5. Relative Humidity: 0-95%, non condensing
6. Intrinsically Safe: Yes
7. Lightning protection: Required

b) Transmitter:

1. Type: Smart Type
2. Enclosure: NEMA-4 & IP-65/Zone 1 Gr. IIB & C
3. Enclosure Material: MFG Std.
4. Wetted parts material: SS316/Hastelloy-C
6. Cable entry: 1/2" NPT F
7. Mounting: 2 inch Pipe
8. Installation: Horizontal impulse piping type
9. Calibration range: 0-5000 mmwc
10. Power Supply: 24 VDC
11. Accuracy: $\pm 1\%$ of calibrated span
12. Rangeability: 1:100 Max
13. Output: 4-20 mA
14. Accessing Protocol: HART
15. Local Indicator: LCD
16. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines

Accessories: Mounting Clamp, 5-way Manifold

I) Temperature Transmitter (For Sl. No. 74):

a) General:

1. Service: Heavy Oil / Heavy Oil+Gas
2. Temperature Range: 0-150 degC
3. Location: Field
4. Operating Pressure (Max.): 5.0 kg/cm²
5. Ambient Temperature: (-5)-55 degC
6. Relative Humidity: 0-95%, non condensing
7. Intrinsically Safe: Yes
8. Lightning protection: Required

b) Transmitter:

1. Type: Smart Type
2. Enclosure: NEMA-4 & IP-65/Zone 1 Gr. IIB & C
3. Enclosure Material/Housing: MFG Std.
4. Input: T/C-K type
5. Immersion Length: 400 mm - 2 nos. (Process Connection: 1 1/2" 150#RF,SS316)
200 mm- 2 nos. (Process Connection: 1" NPT M,SS316)
6. Cable entry: 1/2" NPT F
7. Mounting: Head Mount
8. Power Supply: 24 VDC
9. Accuracy: $\pm 0.2\%$ of span
10. Cold Junction: ± 0.5 degC for every 25 degC in ambient temperature
11. Output: 4-20 mA
12. Accessing Protocol: HART
13. Integral indicator: Digital indicator
14. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines

Accessories: K type Thermocouple, standard accessories

J) Gate Valve, Size : 150 mm (6") Nominal Bore, ANSI-150 Class rating (For Sl. No. 55):

Hand wheel operated, Full Bore, rising stem, Bolted Bonnet, Double Disc parallel expandable Gate with parallel seating arrangements, Flanged ends having serrated raised face, complete with Weld neck type raised face Companion Flanges as per ASME B 16.5, Flat gasket, Studs and Nuts. The Valve should have back-seat arrangements. Manufacturing and Testing Standard of Valves - API 600 and API-598 respectively. Body and Bonnet shall be of cast carbon steel as per ASTM A216 Gr. WCB. Stem, Gate segments and Seat shall be of AISI 410 SS Nitro-hardened with HF-7.

K) Gate Valve, Size : 100 mm (4") Nominal Bore, ANSI-150 Class rating (For Sl. No. 56):

Hand wheel operated, Full Bore, rising stem, Bolted Bonnet, Double Disc parallel expandable Gate with parallel seating arrangements, Flanged ends having serrated raised face, complete with Weld neck type raised face Companion Flanges as per ASME B 16.5, Flat gasket, Studs and Nuts.

The Valve should have back-seat arrangements. Manufacturing and Testing Standard of Valves - API 600 and API-598 respectively. Body and Bonnet shall be of cast carbon steel as per ASTM A216 Gr. WCB. Stem, Gate segments and Seat shall be of AISI 410 SS Nitro-hardened with HF-7.

L) Gate Valve, Size : 50 mm (2") Nominal Bore, ANSI-150/ANSI-300 Class rating (For Sl. No. 57 & 58):

Hand wheel operated, Full Bore, rising stem, Bolted Bonnet, Double Disc parallel expandable Gate with parallel seating arrangements, Flanged ends having serrated raised face, complete with Weld neck type raised face Companion Flanges as per ASME B 16.5, Flat gasket, Studs and Nuts.

The Valve should have back-seat arrangements. Manufacturing and Testing Standard of Valves - API 600 and API-598 respectively. Body and Bonnet shall be of cast carbon steel as per ASTM A216 Gr. WCB. Stem, Gate segments and Seat shall be of AISI 410 SS Nitro-hardened with HF-7.

(END OF SECTION – I)

SECTION – II

SCHEDULE OF RATES

1.0 PRICE SCHEDULE FORMAT-I: REVIVAL OF THE PRODUCTION SURFACE SETUP:

This will include the Revival Cost of the Production Surface Setup including mobilization, maintenance services, cost of materials, installation of materials, relocation of water treatment plant, surface preparation & erection, installation & commissioning, demobilization etc.

2.0 PRICE SCHEDULE FORMAT-II: OPERATION & MAINTENANCE

2.1 MOBILIZATION CHARGE FOR O&M – One time Lump-sum charge:

Mobilization charge shall be payable on LUMP SUM basis which covers all costs of the Service Provider to Mobilize Manpower and equipment with all supporting provisions to the designated worksite to perform all the intended services as mentioned under SECTION-I of the tender document.

Mobilization charge is payable when all Manpower and equipment with all supporting provisions are mobilized and to be in readiness to undertake the assigned jobs.

2.2 DEMOBILISATION CHARGE FOR O&M – One time Lump-sum charge:

Demobilization charge shall be payable on LUMP SUM basis which covers costs of the Service Provider to demobilize Manpower and equipment with all supporting provisions from worksite.

Demobilization charge is payable upon 100% completion of demobilization and upon Completion of all the obligations under the contract.

Note: Mobilization charges should not be more than 7.5 % Of the contract value and Demobilization Charges should not be more than 5 % of the total contract value otherwise the offer will be liable for rejection.

2.3 OPERATION AND MAINTENANCE RATE - Monthly lump-sum

The operation and Maintenance shall be payable on LUMP SUM per month basis for all the services as mentioned under SECTION I except Optional Services of the tender document. For calculation on day/hourly rate, the monthly rate will be prorated. The operation and maintenance rate must be quoted under the following headings in the price bid format, Proforma II:

- i) Operation of Installations: Per month (lump-sum)
- ii) Maintenance of Installations: Per month (lump-sum)

Operation and Maintenance charge of installation shall include operation and maintenance of the Well Site set-up including HP Boilers & ancillaries, Production Surface set-up including MP Boilers & ancillaries, interconnecting pipelines of the two installations, field pipelines of respective installation.

NOTE:

2.3.1 Any Service other than optional may be terminated at the discretion of the Company at any time during the agreement, on one-month notice and the lump-sum per month rate of the agreement would be reduced accordingly as per the quoted rate. In the event of Company requiring the same, even after termination at any point of time, the Service Provider
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will have to provide the service on two month's notice and payment for the same will be made as per quoted rates.

2.3.2 Service Provider shall engage qualified/experienced manpower for carrying out welding, cutting and grinding jobs as per API-1104, AWS D 10.4- 86 and ASME-B-31.3 for maintenance activity. For welding in piping, pressure parts under IBR, only qualified IBR welder shall be engaged. Cost of consumables shall be reimbursed by the COMPANY as mentioned under para no. 2.3.3. Company shall reserve the right to utilize the welding service, if necessary, in OIL's other operational areas without any extra cost to the company. Service provider shall quote the same in maintenance charge accordingly. In case any other item/material is required during revival of surface set up which is not mentioned in the scope of supply of this tender, OIL may ask the bidder to procure the same and the cost of such materials will be paid on actuals.

2.3.3 Consumables viz. AP3 grease, general purpose grease, contact cleaner, PVC tape, black tape, emery paper, mutton cloth/jute/cloth pieces, small size nut-bolt/screws, lube-oil for various engines, supply of CFL, starter, tubes, paper for printing, cartridge, pen and protective paints will be entirely to contractor's account. Spares like nut-bolts, screws, battery for meters and instruments, cables, wires, single phase single pole MCB, 5A/6A switch, 5A/6A socket, 5A/6A plug, bulbs, tube lights, T/L starter, T/L choke, T/L side holders, T/L starter holder, CFL lamp, window and split air conditioner capacitors, cooler pumps will be entirely to contractor's account. Other ancillary items, if any, of individual value less than INR 500.00 (Rupees five hundred only) per unit per item will also be on contractor's account irrespective of total quantity and price. However, in case the unit cost of any single item is equal to or more than INR 500.00 (Rupees five hundred only), the same shall be reimbursed by the Company including 5% (Five percent) handling charges above the actual cost of the item so procured. Service provider must maintain adequate stock of essential consumables at site to ensure uninterrupted service. However, chemicals for Water Treatment Plant will be provided by the Company. Inventory control of consumables shall be Service Provider's responsibility.

2.3.4 A list of spares available with the Company shall be handed over to the Service Provider and the available spares will be issued as and when required. In addition to this, if any spares are required to run the installations un-interrupted, the Service Provider shall plan and procure the spares accordingly with Company's written consent. Cost of the same will be reimbursed on actual plus 5% handling charges to the Service Provider on production of documentary evidence along with related invoice. Service provider must maintain adequate stock of essential Spare Parts at site to ensure uninterrupted service. Inventory control of Spare Parts shall be Service Providers responsibility.

2.3.5 Diesel generators are available at for the power supply purpose to the installations. Company will provide HSD required for running of the generator on the basis of actual consumption only for which the record shall be maintained by the contractor. Alternately, the same shall be supplied by the contractor on reimbursable basis. In such case only the cost of HSD consumed as per prevailing market rate plus 5% handling charges shall be paid to the contractor by Company. The rate of consumption (quantity) shall be considered as per average past consumption records (month-wise). All other consumables including engine oil etc., & routine maintenance of the generator set shall be on contractor's account.

2.3.6 Monitoring of oil wells (besides the two wells included with the steam set-up) and recording of various well head parameters on daily basis, scheduled maintenance of well head valves and fittings, changing of beans, closing/opening of wells as per demand, operation & maintenance of sucker rod pumps and its ancillaries shall generally be carried out by OIL directly through its own infrastructure and manpower. However, Contractor may be asked to

engage their manpower and facilities for any exigencies occurred. Tools and equipments required for the job shall be provided by Company at free of cost.

2.3.7 Transportation of Service Provider's men and materials etc. required to perform the activities mentioned under SECTION-I of the tender document shall be on Service Providers account.

2.3.8 Maintenance team shall comprise of qualified Operators, Technicians and Helpers. Proper maintenance tools and allied equipment shall be available with the team. Maintenance of mechanical/electrical/instrumentation equipment list is attached with the Tender document. Maintenance includes top/major overhauling also.

2.4 FORCE MAJEURE DAY RATE - per day (lump-sum)

Force Majeure Day Rate shall be applicable in case of force majeure condition as detailed in para 21.0 of Section-IV. Bidder should restrict the Force majeure day rate within 80% of the lump-sum operating & maintenance rate (pro-rata per day) of respective unit as specified under para 3.0 above. Bidders must adhere strictly to the same, failing which the offer shall be liable for rejection.

- i) Force Majeure Day Rate of **Installations**: Per day (lump-sum)

No any rate, other than Force Majeure Day Rate, shall be payable during the force Majeure period.

2.5 MAINTENANCE DAY RATE - per day (lump-sum)

Maintenance Day Rate on LUMP SUM per day shall be payable during **scheduled shutdown** of the installations. During this period major maintenance of Company's installations and equipment has to be planned and carried-out by the Service Provider. In case when major maintenance is not carried out, **Stand-by day rate** shall apply during this period.

- i) Maintenance Day Rate for Installations: Per day (lump-sum)

2.6 STAND-BY DAY RATE – per day (lump-sum)

Stand-by Day Rate shall be applicable in the event of any extra-ordinary unforeseen situations like unscheduled shutdown because of OIL decision to halt the operations for any production related issues etc. leading to stoppage of crude supply to bowser for more than ten (10) days.

The Stand-by Day Rate shall be applicable after ten (10) days till the operation resume.

Upon occurrence of such situation, the Service Provider will be notified in writing by the Company.

Service Provider shall restrict the **Stand-by day rate** within 80% of the Operation and Maintenance day rate (Pro-rated) of respective unit as specified under para 2.4 above. Bidders must adhere strictly to the same, failing which the offer shall be liable for rejection.

- i) Stand-by Day Rate for Installations: Per day (lump-sum)

Water shall be regularly drained from the storage tanks during this period. Minor maintenance of the installations may be required to carry out as per instruction of OIL site-in-charge to keep the installation ready for operation. No any rate, other than Stand-by Day Rate, shall be payable after ten (10) days of occurrence of situation as mentioned above.

2.7 OPTIONAL:

a) Production Attendant:

The Contractor shall deploy additional Production Attendant for OIL Well Site (other than the two nos. included with the steam set-up) if OIL decides to take the service at any time during the contract. At any time, OIL will ask maximum 4 (four) nos. of Production Attendant. For calculation on hourly rate, the daily rate will be prorated. The above requirement is temporary in nature and during the tenure of the contract. OIL may anytime ask the Service Provider to release the manpower from OIL site by giving written notice.

b) Fire Operator/Assistant Fire Operator:

The Contractor shall deploy additional manpower if OIL decides to take the service at any time during the contract. At any time, OIL will ask maximum 1 (one) no. each of Fire Operator and Assistant Fire Operator. For calculation on hourly rate, the daily rate will be prorated. The above requirement is temporary in nature and during the tenure of the contract. OIL may anytime ask the Service Provider to release the manpower from OIL site by giving written notice.

3.0 LIQUIDATED DAMAGES FOR DEFAULT IN TIMELY MOBILISATION / COMPLETION:

3.1 Time is the essence of the Agreement. The Contractor shall be liable to pay liquidated damages at the rate of 0.5% of the total evaluated contract value for delay of each week or part thereof, subject to maximum of 7.5%, in the event of default by the Contractor in completion the site jobs under PART-A upto the satisfaction of OIL authority within the scheduled time frame of 30 (thirty) days of official intimation from Company for mobilization. The above will be considered separately for both the stages i.e. Stage-I & II of PART-A.

3.2 Mobilization for O&M (PART-B of the contract) should be completed within the stipulated period. In the event of Service Provider's default in timely mobilization for commencement of O&M within the stipulated period of 30 (thirty) days from the date of official intimation of mobilization, the Service Provider shall be liable to pay liquidated damages at the rate of 0.5 % of the total evaluated O&M contract value of the agreement (PART-B) per week or part thereof of delay subject to maximum of 7.5%.

3.3 The Contractor shall be liable to pay liquidated damages at the rate of 0.5% of the monthly evaluated O&M contract value (PART-B) for delay of each week or part thereof, subject to maximum of 7.5%, in the event of default by the Contractor in placing the manpower for execution of the optional services as required by Company within the scheduled time frame of 10 (Ten) days of official intimation from the Company.

3.4 The Company may without prejudice to any other right or remedy available to it to recover damages for breach of agreement, recover the liquidated damages as above from the Service Provider not by way of penalty but this is an agreed, genuine pre-estimate of damages duly agreed by the parties.

3.5 The Company also reserves the right to cancel the agreement without any compensation whatsoever in case of failure to mobilize and commence operation within the stipulated period.

4.0 PENALTY:

4.1 The Service Provider shall ensure of superheated quality steam for injection to the well bore. The Service Provider shall also ensure correct temperature of the emulsified liquid to reduce viscosity and also chemical injection as per OIL instruction. Failure to do so shall be liable for penalty as per clause No. 4.4 below.

4.2 Apart from OIL's approved installation shutdown and shutdown due to force majeure conditions for any unforeseen reasons beyond the control of company and Service Provider, for any other shutdown that may occur due to faulty operation by the Service Provider or

reasons attributable to the Service Provider's improper up-keepment and maintenance of any equipment, the Service Provider shall be liable for penalty as per clause No. 4.4 below.

4.3 For use of control panel in the control room only authorized personnel shall be allowed. Due to wrong / mishandling, if malfunction occurs to the PLC/SCADA system leading to shutdown of the installations, penalties shall be imposed as per clause no. 4.4. Apart from the said penalty, the Service Provider has to bear the repairs/replacement cost of the damaged equipment.

4.4 The rate of penalty that shall be levied against point No. 4.1 to 4.3 are as under:

INR 25,000/- (Rupees Twenty-Five Thousand only) per day or part thereof on pro-rata basis for the first seven days from the time and date of the shutdown of the installations. If the operation of the installation is not resumed after the expiry of seven days, no day/monthly rate (Operation and Maintenance) or part thereof on pro-rata basis for the respective unit/asset shall be payable to the Service Provider. Besides after the expiry of seven days, OIL may consider to do the maintenance service from third party and the Service Provider shall be liable to pay the service cost

4.5 Operation and Maintenance activities to be carried out in such a way that there should not be any breakdown of the plant/equipment. For any such breakdown immediate action to be taken by the Service Provider to put back this equipment in operation without loss of time. Depending on the nature of repairing job involvement, suitable time period will be given to the Service Provider which may be maximum of 4 hours if the spares are readily available at the site, and 48 hours if the spares/equipment are procured/repared at outstation. For malfunctioning/shutdown of any equipment of the installations for reasons attributable to the Service Provider, the Service Provider shall be penalized at the rate of INR 10,000/- (Rupees Ten Thousand only) per day or part thereof on pro-rata basis after expiry of the allotted time period of rectification until the fault is rectified. However, any such breakdown/failure of plant or equipment effecting in production and loading of crude to the bowser will attract penalty as specified in clause 4.4 above.

4.6 In the event of non availability of any personnel as stated under clause no. 10.0 of SECTION – I and enclosed Annexure-A of the tender document, the Service Provider will have to provide suitable replacement with similar qualification and experience within 48 hours. In the event of failure, penalty at the rate of INR 1000.00 (Rupees One Thousand only) per person per day irrespective of the grade of the non available manpower will be applicable until suitable replacement is provided.

4.7 Damage or loss of any Company property, equipment, machinery, furniture, spare parts etc. under the custody of operation and maintenance Service Provider in all the installations shall be borne by the Service Provider at the actual value of the items which shall be unilaterally decided by the Company or the Service Provider has to restore back the items to its original position by replacement/repairing at their cost. Inventory list of all the above items shall be made by the Service Provider jointly with Company's representative and shall be updated at every three months' interval.

4.8 In the event of non execution of any job as stated under SECTION –I of the tender document by the Service Provider, Company will take action for execution of the job and cost will be charged with 20 % extra from the Service Provider.

4.9 Payment against format – I will be made in three parts.

- i) First part will include mobilization of manpower, machinery & equipment of the bidder. (10%)
- ii) Second part will include identification and supply of materials. (20%)
- iii) Third part will have erection of foundation for water treatment plant at new location, shifting of the same to the new location, installation, revival and commissioning. (45%)
- iv) On completion of all the jobs and de-mobilization. (25%)

(END OF SECTION -II)

SECTION-III

PRICE SCHEDULE FORMAT-I

PART-I: SERVICE

(FOR THE PURPOSE OF COMMERCIAL EVALUATION OF BIDS)

1.0 The rates/prices as entered herein are exclusive of all taxes, duties and levies including Service Tax etc. and the same must be indicated separately.

2.0 The rates/charges payable by Company to the Contractor towards full and proper performance of their contractual obligations in consistence with the provisions of the contract as agreed below. The payment for services will be made at actual.

Sl. No. (1)	Description (2)	UOM (3)	Qty. (4)	Unit Rate (5)	Total (6)
1	<u>Mobilization Charges:</u> a) Contractor to mobilize the manpower, machineries and materials required for the job at site, establish necessary camp to start the job. Mobilization of manpower will be considered completed when all the key personnel including the site supervisor/engineer and machineries and equipments as may be necessary reached at site for the Stage-I of PART-A of the SOW. The same will be certified by the OIL site in-charge/representative. b) Contractor to mobilize the manpower, machineries and materials for executing the Stage-II of PART-A of the SOW at site. The same will be certified by the OIL site in-charge/representative.	Lumpsum	01		
2	<u>Demobilization Charges:</u> Charges towards complete demobilization of Contractor's crew and machinery including the camp etc. from the site to their base after completion of PART-A of the contract to the satisfaction of Company. Besides that, Demobilization will be considered complete upon removal of all waste materials from the job site and the same will be certified by OIL site in-charge/representative.	Lumpsum	01		
3	<u>Health check-up & maintenance Services of the plant (STAGE-I):</u> Complete health check-up of all	Lumpsum	01		

	the flow lines, vessels, equipments etc. However, services like Hydraulic Testing, Radiography etc. which are categorically mentioned as separate service shall not be included.				
4	Revival, Shifting, Connecting Services as per Scope of Work (STAGE-II): All types of revival, shifting, connection Services including installation of spare materials etc. Services which are categorically mentioned as separate service shall not be included. Bidder has to check for leakage if any in the hooked up set up. Bidder has also to connect all cables to the panel & do all the necessary jobs for start up of the water treatment plant	Lumpsum	01		
5	Surface preparation & foundation: i. Water tanks ii. Water treatment plant & accessories iii. Fuel tank & accessories (optional) iv. Water pumps & accessories				
	i. Water tanks	NOS	1		
	ii. Water treatment plant & accessories	NOS	2		
	iii. Fuel tank & accessories (optional)	NOS	2		
	iv. Water pumps & accessories	NOS	4		
6	Laying & Erection of Pipeline: i) Size: 1/2 inch ii) Size: 1 inch iii) Size: 2 inch iv) Size: 4 inch v) Size: 6 inch vi) Size: 8 inch	MTR	150 300 200 600 100 50		
7	Handling, Aligning & Installing of Valves: i) Size: 1/2 inch-1 inch ii) Size: 2 inch iii) Size: 4 inch iv) Size: 6 inch	NO	120 40 30 20		
8	Handling, Aligning & Installing of Flanges: i) Size: 1 inch ii) Size: 2 inch ii) Size: 4 inch iii) Size: 6 inch	NO	50 60 60 35		
9	Insulation of pipeline: The requirement of new insulation will be as per OIL decision. The				

	materials for insulation of the line will be to the Contractor's account. (i) Size: 2 inch (ii) Size: 4 inch (iii) Size: 6 inch (iv) Size : 8 inch	MTR	100 200 100 100		
10	Installation/Hooking up of Steam Trap	NO	15		
11	a) Fabrication of 6 inch Jacket over 4 inch section b) Fabrication of 8 inch Jacket over 6 inch section Note: The insulation materials will be to the Contractor's account.	MTR	20 20		
12	1 inch Insulation of the vessels. The materials shall be to the Contractor's account.	SQ. MTR	100		
13	Butt welding of the Pipeline (Steam, Water, Crude, Gas, Water condensate etc.): a) 1/2 inch pipe b) 1 inch pipe c) 2 inch pipe d) 4 inch pipe e) 6 inch pipe f) 2 inch Pipe (IBR) g) 4 inch pipe (IBR) h) 6 inch pipe (IBR) Note: The welding consumables shall be to the Contractor's account. Job includes all preparation like cutting/grinding and face preparation for welding.	No. of weld joints	20 20 50 50 20 25 30 20		
14	Hydraulic Testing of all piping newly laid. Note: a) Water supply for hydraulic testing is contractor's liability, however OIL may provide the source of water if required. b) During testing the pressure in the system under test shall be recorded continuously, on chart which shall be signed, certified and handed over to OIL. Contractor shall bring their own Pressure recorder. c) During hydro testing, if it is found defective the same shall be repaired and retesting. During retesting, if it is found defective due to poor workmanship, the same shall be repaired by the	Lumpsum	1		

	Contractor at free of cost. d) The Contractor shall carry out hydro testing of the steam pipelines as per IBR requirement, wherever it arises				
15	Hydraulic Testing of all VESSELS. Note: a) Water supply for hydraulic testing is contractor's liability, however OIL may provide the source of water if required. b) During testing the pressure in the system under test shall be recorded continuously, on chart which shall be signed, certified and handed over to OIL. Contractor shall bring their own Pressure recorder.	Lumpsum	1		
16	Hydraulic Testing of all piping which are re-laid connecting the steam boilers brought from BGW#6 to new location	Lumpsum	1		
17	Radiographic inspection of the welded joints for the following sizes of pipes: a) 1/2 inch a) 1 inch b) 2 inch c) 4 inch d) 6 inch Note: Radiography of Steam pipeline shall be carried out as per IBR. guideline/specification.	No. of Joints	20 20 50 50 20		
18	Fabrication of Clamps for i) Size: 2" dia. pipe ii) Size: 4"-6" dia. pipe ii) Size: 8 " dia. pipe	NO	20 50 20		
19	Fabrication of Nipples of sizes: a) 1/2 inch ASTPT b) 1 inch ASTPT c) 2 inch API 5L d) 4 inch API 5L e) 6 inch API 5L	NO	20 20 10 5 5		
20	Painting of piping, vessels: a) Letter writing/ arrow marking on piping, vessels, tanks, pumps shed, signboards etc. as per advice of OIL representative with synthetic paints. The writing may be in English or Hindi as per the				

	<p>instructions of Company representative. All materials for the job including paint, paint brush etc. shall be arranged by Contractor. Size of the letter from 50 mm to 200 mm.</p> <p>(i) Size: 50 mm (ii) Size: 75 mm (iii) Size: 100 mm (iv) Size: 150 mm</p>	No. of Letters	3000 2000 1500 1500		
21	<p>Cleaning of outer surfaces of the existing piping, vessels and tanks at the installation by sand blasting or any other mechanical means to remove existing work out layer of paint, dirt etc. and to prepare the surface of the target. This shall be followed by application of two coats of synthetic paint of appropriate colour as per advice of the OIL representative. Painting shall be done by applying one coat of synthetic primer over the surface of the target followed by two coats of synthetic paint of appropriate colour. All the tools, equipments and consumables including scaffolding, paint, paint brush for the purpose shall be arranged by the Contractor.</p> <p>i. Water tanks</p> <p>ii. Allied piping connection</p> <p>iii. Fuel tank & accessories</p> <p>iv. Tanks/vessels of water treatment plant and its accessories</p>	NOS SQ MTR NOS NOS	2 250 6 2		
22	<p>Barbed wire fencing (60x45 sq. m) height of the fencing should be 6 feet from the ground level.</p>	lsm	1		
23	<p>Display sign boards: Size: 1. 800 MM X 600 MM – 5 Nos 2. 600 MM X 300MM – 4 Nos 3. 300 mm X180 mm - 6 Nos</p>	No	15		
Electrical Cable Laying Jobs					
24	Laying of U/ground cable (3.5 × 240 sq.mm)	MTR	240		
25	Laying of U/ground Cable (4×25 sq.mm)	MTR	50		

26	Laying of U/ground Cable (3×2.5 sq.mm)	MTR	400		
27	Laying of Tie Cable (4×70 sq. mm)	MTR	40		
28	Laying of Tie Cable (4×25 sq. mm)	MTR	20		
29	Laying of Tie Cable (4×16 sq. mm)	MTR	450		
30	Laying of Tie Cable (4×6 sq. mm)	MTR	350		
31	Laying of Tie Cable (4×2.5 sq. mm)	MTR	200		
32	Laying of Tie Cable (3×2.5 sq. mm)	MTR	650		
33	Laying of Tie Cable (5×2.5 sq. mm)	MTR	450		
Instrumentation Cable/Cable Tray Laying Jobs					
34	Laying of Signal Cable: i) Signal Cable 1P × 1.5 MM2 ii) Signal Cable 6P × 0.5 MM2 iii) Signal Cable 3P × 1.5 MM2	MTR	600 600 200		
35	Laying of Cable Trays	MTR	100		
Electrical Jobs Including supply of Materials					
36	Supply, erection, testing & commissioning of four pole structure	NOS	3		
37	Supply, erection, testing commissioning of copper wound transformer of rating 500KVA, 11/0.433KV including foundation	NO	1		
38	Supply, erection, testing commissioning of copper wound transformer rating 250 KVA, 11/0.433KV including foundation	NO	2		
39	Supply, erection of NGR (Neutral grounding resistor) & accessories including construction of canopy and foundation	NO	3		
40	Supplying and laying and terminations of XLPE insulated and PVC sheathed armoured cable	MTS	600		
41	Supply, Installation, testing and commissioning of Outdoor type distribution panel board including foundation	NOS	3		
42	Supply, Installation, testing and commissioning of High lumen efficient out door type IP:65/66 category, 90 Watt LED Flood light including foundation	NOS	60		
43	Lighting Pole: 9 mtrs length Supply, erection, installation and concrete foundation with suitable stainless steel nut bolts	NOS	30		
44	Supplying and laying Cable (4 core X 6 Sq mm)	MTS	1000		
45	Supplying and laying Cable (4 core X 16 Sq mm)	MTS	500		

46	Revival of existing area lighting (400 W metal halide fitting) 15 nos	LSM	1		
(i) TOTAL COST FOR SERVICE (Sum Total of Column 6 above)					XXX

PART-II: SUPPLY OF MATERIALS

a) The bidder shall offer the cost of Materials for production set up on FOR Destination (Baghewala Pilot Plant) basis.

b) The items will be optional and decision of procurement lies with OIL. OIL will issue separate P.O. for the materials after completion of Stage-I of PART-A (quantity as per actual requirement) if OIL will decide to procure the same. The price will be fixed till completion of PART-A of the contract period. The quantity mentioned against each item is tentative, which may increase, decrease depending on the actual field requirement. The payment will be made as per actual usage.

All the valves and fittings under the scope of the tender will be of API 6D only and all piping (wherever necessary) should be as per API 5L only. Documentary evidence needs to be provided along with supply in regard to this for release of payment.

Sl. No. (1)	Description (2)	UOM (3)	Qty. (4)	Unit Rate (5)	Total Amount (6=4×5)
MECHANICAL ITEMS					
1	Pipe 2"× Sch-40 × ASTM A-106 (IBR)	MTR	100		
2	Pipe 4"× Sch-40 × ASTM A-106 (IBR)	MTR	300		
3	Linepipe, ERW, 6" × Sch-40 API-5L Bevel	MTR	100		
4	Linepipe, ERW, 8" × Sch-40 API-5L Bevel	MTR	50		
5	Black Sheet Linepipe, ERW, 1", IS-1239	MTR	100		
6	Black Sheet Linepipe, ERW, 1/2", IS-1239	MTR	100		
7	1/2" Sch-80 A106 Gr.B Pipe (Seamless)	MTR	50		
8	1/2" Sch-80 A106 Gr.B IBR quality Pipe (Seamless)	MTR	20		
9	1/2" Sch-40S, A312 TP304 (Seamless) Pipe	MTR	20		
10	1" Sch-40S, A312 TP304 (Seamless) Pipe	MTR	20		
11	1/2" Sch-40S, A312 TP304L (Seamless) Pipe	MTR	20		
12	6"×6"×6" Tee, ASTM-234, Sch-40	NO	10		
13	4"×4"×4" Tee, ASTM-234, Sch-40	NO	10		
14	2"×2"×2" Tee, A105 IBR Equal Tee	NO	10		

15	1/2 " SW 300#, A105 Equal Tee	NO	10		
16	1/2 " SW 300#, A105 IBR Equal Tee	NO	10		
17	1/2"SW×1/2"SW×1/2"SW, 300#, A182 F304 Equal Tee	NO	2		
18	1" Tee × Sch-40 with NPT female	NO	5		
19	1/2" Tee × Sch-40 with NPT female	NO	5		
20	1/2" NPTM×1/2"Plain, Sch-80, A106 Gr.B,150 MM Long Nipple	NO	10		
21	1/2" NPTM×1/2"Plain, Sch-80, A106 Gr.B IBR,150 MM Long Nipple	NO	10		
22	1" NPTM×1"Plain, Sch-80, A106 Gr.B IBR,150 MM Long Nipple	NO	10		
23	90 deg. Bends 4"× sch-40 Carbon Steel	NO	20		
24	90 deg. Bends 6"× sch-40 Carbon Steel	NO	10		
25	90 deg. Bends 4"× Sch-40 (IBR)	NO	5		
26	90 deg. Bends 2"× Sch-40 (IBR)	NO	10		
27	90 deg. Bends 1"× Black Steel long Radius	NO	10		
28	90 deg. Bends 1/2"× Black Steel long Radius	NO	10		
29	1/2" Quick Union with socket	NO	20		
30	1" Quick Union with socket	NO	20		
31	1"Elbow Sch-40 with NPT female	NO	10		
32	1/2"Elbow Sch-40 with NPT female	NO	10		
33	1/2"NPTF×1/2"SW, 3000#, A105 Adapter	NO	5		
34	1/2"NPTF×1/2"SW, 3000#, A105 IBR Adapter	NO	2		
35	1/2"NPTF×1/2"SW, 3000#, A182 F304 Adapter	NO	2		
36	1"NPTF×1"SW, 3000#, A182 F304 Adapter	NO	2		
37	1/2"SW×1/2"SW,3000#,A105 Coupling	NO	5		
38	1/2"SW×1/2"SW,3000#,A105 IBR Coupling	NO	5		
39	1/2"SW×1/2"SW,3000#,A182 F304 Coupling	NO	5		

40	1"SW×1"SW,3000#,A182 F304 Coupling		5		
41	1" CS NRV as per BS-1868	NO	10		
42	1/2" CS NRV as per BS-1868	NO	10		
43	2"×1"NB C.S. Reducer, Sch-40	NO	10		
44	1"×1/2" NB C.S. Reducer, Sch-40	NO	5		
45	1"NB C.S. Socket	NO	5		
46	1/2"NB C.S. Socket	NO	5		
47	1"× ANSI 300 Class Flange (IBR quality) with stud, bolt & flat gasket	NO	3		
48	2"× ANSI 300 Class Flange (IBR quality) with stud, bolt & flat gasket	NO	5		
49	4"× ANSI 300 Class Flange (IBR quality) with stud, bolt & flat gasket	NO	5		
50	2"× ANSI 300 Class Flange with stud, bolt & flat gasket	NO	5		
51	4"× ANSI 300 Class Flange with stud, bolts & flat gasket	NO	10		
52	6"× ANSI 150 Class Serrated RF Flange with stud, bolt & flat gasket	NO	5		
53	4"× ANSI 150 Class Serrated RF Flange with stud, bolt & flat gasket	NO	5		
54	2"× ANSI 150 Class Serrated RF Flange with stud, bolt & flat gasket	NO	5		
55	Gate Valve, Size:150 mm (6") NB, ANSI 150 Class	NO	5		
56	Gate Valve, Size:100 mm (4") NB, ANSI 150 Class	NO	20		
57	Gate Valve, Size:50 mm (2") NB, ANSI 150 Class	NO	20		
58	Gate Valve, Size:50 mm (2") NB, ANSI 300 Class	NO	5		
59	1/2"SW×1/2"SW, 800#, A105 Globe Valve	NO	5		
60	1/2"SW×1/2"SW, 800#, A105 IBR Globe Valve	NO	5		
61	1/2"SW×1/2"SW, 800#, A182 F304L Globe Valve	NO	5		
62	1/2"SW×1/2"SW, 800#, A182 F304 Ball Valve	NO	10		
63	1"SW×1"SW, 800#, A182 F304 Ball Valve	NO	10		
64	1/2"NPTF, 800#, A182 F304 Ball Valve	NO	5		

INSTRUMENTATION ITEMS					
65	Diaphragm Sealed Pressure Gauges: i) Pressure Gauge/ Range: 0-10 kg/cm2 ii) Pressure Gauge/Range: 0-6 kg/cm2	NO	10 3		
66	Pressure Gauge, Range: 0-10 kg/cm2	NO	10		
67	Temperature Gauge w/o Thermowell: a) Temperature Gauge (Filled Bulb), Range: 0-150 degC b) Dial Temperature Gauge (Bi-metal), Range: 0-150 degC	NO	3 10		
68	Temperature Gauge with Thermowell: a) Temperature Gauge (Filled Bulb), Range: 0-150 degC b) Dial Temperature Gauge (Bi-metal), Range: 0-150 degC	NO	3 10		
69	Diaphragm Seal Type Pressure Switch: Range: 0-5 kg/cm2 Set Point: 2.2 kg/cm2	NO	1		
70	Pressure Transmitter with remote sealed diaphragm	NO	2		
71	Level Transmitter (remote Sealed DP Type)	NO	2		
72	Differential Pressure Transmitter	NO	2		
73	Temperature Transmitter (0-150 degC): a) Process Connection 1 1/2" 150#RF b) 1" NPTM	NO	3 2		
74	Seamless SS Tubings (A269 TP304): Tubings shall be from reputed manufacturer Parker, Swagelok i) Size: 1/4 inch OD/ 1.0 MM Thickness ii) Size: 1/2 inch OD/ 1.0 MM Thickness	MT R	300 50		
75	Male Connector: a) 1/4" NPTM × 1/4" OD, A182 F316, Complete with Double Ferrule b) 1/2" NPTM × 1/2" OD, A182 F316, Complete with Double Ferrule	NO	50 20		

76	Straight Connector: a) 1/4" OD × 1/4" OD, A182 F316, Complete with Double Ferrule b) 1/2" OD × 1/2" OD, A182 F316, Complete with Double Ferrule	NO	20 10		
77	Signal Distributor: shall be from reputed manufacturer MTL, P&F etc.	NO	15		
78	Isolating Driver (for I/P converter): shall be from reputed manufacturer MTL, P&F etc.	NO	3		
79	Spares for Control Valve: a) 3 inch i) Plug and Seat ii) Diaphragm b) 4 inch i) Plug and Seat ii) Diaphragm	NO	2 2		
80	Needle Valve (SS316): shall be from reputed manufacturer Parker, Swagelok Size: 1/2 inch NPTF a) The valve body should be made out of material conforming to ASTM A182/ASME SA182 Gr. SS316	NO	20		
81	Cables (LDPE Insulation & Overall Shielded): i) Signal Cable 1P × 1.5 MM2 ii) Signal Cable 6P × 0.5 MM2 iii) Signal Cable 3P × 1.5 MM2	MT R	800 800 500		
82	Perforated G.I. Cable Tray a) 100 MM width × 2.5 MM Thick × 25 MM Height × 2500 MM Long a) 200 MM width × 2.5 MM Thick × 25 MM Height × 2500 MM Long	MT R	40 50		
83	Coupler: a) For 100 MM wide Cable Tray (G.I.) each complete with 8 sets of screw, nuts & washer b) For 200 MM wide Cable Tray (G.I.) each complete with 8 sets of screw, nuts & washer	SET S	20 20		

ELECTRICAL ITEMS					
84	1 Ph 0.37 KW Motor with Pump	NO	8		
85	3.5×240 sq. mm Al Cable	MTR	500		
86	4×25 sq. mm Al Cable	MTR	210		
87	4×16 sq. mm Al Cable	MTR	40		
88	4×6 sq. mm Cu Cable	MTR	480		
89	4×2.5 sq. mm Cu Cable	MTR	600		
90	3×2.5 sq. mm Cu Cable	MTR	370		
91	5×2.5 sq. mm Cu Cable	MTR	860		
92	Flameproof Start/ Stop Push Buttons for Local Control Station	NO	22		
93	5 KVA 115V UPS with 8 nos. of battery of capacity 24 VAH	NO	2		
94	8.5 mm thick Rubber Mat	NO	10		
95	Flame Proof Cable Gland (4×25 sq.mm)	NO	4		
96	Flame Proof Cable Gland (4×2.5 sq.mm)	NO	35		
97	Flame Proof Cable Gland (3×2.5 sq.mm)	NO	27		
98	Flame Proof Cable Gland (5×2.5 sq.mm)	NO	6		
99	Safe Area Cable Gland (3.5×240 sq.mm)	NO	5		
100	Safe Area Cable Gland (4×70 sq.mm)	NO	5		
101	Safe Area Cable Gland (4×25 sq.mm)	NO	4		
102	Safe Area Cable Gland (4×16 sq.mm)	NO	10		
103	Safe Area Cable Gland (4×6 sq.mm)	NO	5		
104	Safe Area Cable Gland (4×2.5 sq.mm)	NO	5		
105	Safe Area Cable Gland (3×2.5 sq.mm)	NO	5		
106	Safe Area Cable Gland (5×2.5 sq.mm)	NO	16		
107	Cable Lugs (3.5×240 sq.mm)	NO	5		
108	Cable Lugs (4×70 sq.mm)	NO	110		
109	Cable Lugs (4×25 sq.mm)	NO	4		
110	Cable Lugs (4×16 sq.mm)	NO	32		
111	Cable Lugs (4×6 sq.mm)	NO	100		
112	Cable Lugs (4×2.5 sq.mm)	NO	100		
113	Cable Lugs (3×2.5 sq.mm)	NO	20		
114	Cable Lugs (5×2.5 sq.mm)	NO	180		
115	2.5 sq. mm PVC wire for wiring	MTR	360		
116	1.5 sq. mm PVC wire for	MTR	70		

	wiring				
117	PVC Conduit for wiring	MTR	5		
118	Switch Board (20 × 25 cm)	NO	7		
119	Switch Board (10 × 15 cm)	NO	20		
120	Switch Board (10 × 10 cm)	NO	5		
121	15 Amp. Switch Socket	NO	6		
122	Junction Box, 15A, 230V, 1P	NO	7		
123	5 Amp. Switch Socket	NO	31		
124	20 Amp. Industrial Socket Board	NO	14		
125	5 Amp. Switch	NO	5		
126	400 W LED Floodlight	NO	40		
127	160 W MLL Lamp	NO	5		
128	Fluorescent Tubes-40 W	NO	40		
(ii) TOTAL COST FOR SPARE (Sum Total of Column 6 above)					XXX

(A) Total Cost for Revival : Sum Total of (i+ii) = A

Specification of the Materials:

A) Diaphragm Sealed Pressure Gauge with Screwed Connection (Sl. No.66):

I) Pressure Gauge End Specification:

1. Location: Outdoor field Mounted
2. Measuring Element: Bourdon
3. Measuring Element material: SS316
4. Movement material: SS304/SS316
5. Case material: Die cast aluminium/SS
6. Protection: IP65
7. Colour: White with black engraving
8. Dial size: 150 mm
9. Over range protection: 125% of range
10. Glass: Shatter proof
11. Blowout protection: To be provided
12. Accuracy: ±1% of full scale

II) Sealed Unit End Specification:

13. Process Temperature (Max.): 85 degC
14. Diaphragm material: SS316
15. Sealing Medium: Silicon Oil or Mercury
16. Top Chamber & Bottom Chamber: SS304/SS316
17. Process Connection: 1/2 inch NPT M bottom
18. Make: Baumer/Wika/H.Guru/Aschroft/Baumer or equivalent

B) Pressure Gauge (Sl. No. 67):

1. Range: 0-10 kg/cm²
2. Type: Direct, Mounting: Local
3. Dial Size: 150 mm, white
4. Case: Di-Cast Aluminium/SS
5. Windows: Shatterproof glass

6. Enclosure: Weatherproof, Class-IP65
7. Pressure Element: Bourdon, SS316
8. Bezel Ring: Screwed,
9. Socket: SS316
10. Accuracy: +/- 1% FSD,
11. Overrange protection: 125% of Range
12. Zero adjustment: Micrometer pointer
13. Connection: 1/2" NPT (M), Bottom,
14. Movement: SS316/SS314
15. Blowout protection: To be provided
16. Make: Baumer/Wika/H.Guru/Aschroft/Baumer or equivalent

C) Temperature Gauge (Filled Type) (For Sl. No. 68 & 69):

1. Service: Heavy Oil/Heavy Oil + Gas
2. Type: Filled Type-150 mm dial
3. Location: Field
4. Mounting: Line Mounted
5. Ambient Temperature: (-5)-55 degC
6. Relative Humidity: 0-95%, non condensing
7. Range: 0-150 degC
8. Extension Length: 150 mm
9. Immersion Length: 200 mm
10. Bulb Dia.: 1/2 inch
11. Case material: Die cast aluminium/SS
12. Sheath Material: SS316
13. Capillary: SS316-5 mtr.
14. Element connection to Thermowell: 3/4 inch
15. Process Connection: 1 inch NPTM
16. Thermowell: SS316 Threaded Bar
17. Standards for Thermowell: ASME PTC 19.3
18. Calibration Standard: As per DIN standard
19. Make: Wika/H.Guru/Aschroft/Baumer or equivalent

D) Temperature Gauge (Bimetal Type) (For Sl. No. 68 & 69):

1. Service: Heavy Oil/heavy Oil + Gas
2. Type: BIMETAL-150 mm dial
3. Location: Field
4. Mounting: Line Mounted
5. Ambient Temperature: (-5)-55 degC
6. Relative Humidity: 0-95%, non condensing
7. Measuring Range: 0-150 degC
8. Extension Length: 150 mm
9. Insertion Length: a) 200 mm - 6 nos. (Process Connection: 1 inch NPT M)
b) 400 mm - 4 nos. (Process Connection: 1 1/2 inch 150# RF)
10. Sheath Material: SS316
11. Case material: Die cast aluminium/SS
12. Element connection to Thermowell: 3/4"
13. Wetted parts of Thermowell: SS316
14. Standards for Thermowell: ASME PTC 19.3
15. Calibration Standard: As per DIN standard
16. Make: Baumer/Wika/H.Guru/Aschroft/Baumer or equivalent

E) Pressure Switch (For Sl. No. 70):

1. Type: Blind, Diaphragm seal type
2. Mounting: Local/flush
3. Media: Heavy oil + Gas/ Process Temperature (Max.): 85 degC
4. Sensing element: Diaphragm
5. Material element: SS316
6. Sealing: SS316 capillary of length 5 mtrs.
7. Case material: Die cast aluminium
8. Enclosure: IP-65, zone I Gr.-II B,C
9. Over range: 125% of max. pressure
10. Output: Potential free 2 NO/2NC SPDT
11. Power supply: 110 VDC 2A
12. Cable Entry: 1/2" NPTF
13. Accuracy: $\pm 1.0\%$
14. Repeatability: $\pm 0.5\%$ FSR
15. Process Connection: 3" ANSI 150# RF SS316
16. Make: Switzer or equivalent
17. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines Area
18. Standard accessories

F) Pressure Transmitter (For Sl. No. 71):

a) General:

1. Service: Heavy Oil / Heavy Oil + Gas
2. Pressure Unit: kg/cm²
3. Calibration range: 0-10 kg/cm²
4. Pressure Maximum: 5.0 kg/cm²
5. Operating Pressure: 3.0 kg/cm²
6. Connection Type (HP): 3 " wafer type diaphragm ANSI 300#RF SS316
7. Wetted Parts material: Diaphragm: SS316; Others: SS316
8. Fill Fluid: Silicone Oil
9. Capillary Length: 3 metre
10. Capillary: SS316 with armoured
11. Process Temperature (Max.): 85 degC
12. Ambient Temperature: (-5)-55 degC
13. Relative Humidity: 0-95%, non condensing
14. Intrinsically Safe: Yes
15. Lightning protection: Required

b) Transmitter:

1. Type: Smart Type
2. Enclosure: NEMA-4 & IP-65
3. Enclosure Material: MFG Std.
4. Cable entry: 1/2" NPT F
5. Mounting: 2 inch Pipe
6. Power Supply: 24 VDC
7. Accuracy: $\pm 0.5\%$ of span
8. Output: 4-20 mA
9. Accessing Protocol: HART
10. Local Indicator: LCD
11. Span & Zero Adjustment: To be provided on the body
12. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines
13. Standard accessories

G) Level Transmitter (DP Type) (For Sl. No. 72):

a) General:

1. Service: Heavy Oil
2. Pressure Maximum: 5 kg/cm²
3. Operating Pressure: 3 kg/cm²
4. Connection Type (HP): 3" wafer type diaphragm ANSI 150#RF SS316
5. Measurement Span: 250 to 10000 mmH₂O
6. Wetted Parts Material: Diaphragm: SS316, Others: SS316
7. Fill Fluid: Silicone Oil
8. Capillary: SS316 with armoured
9. Capillary length: 3 metre
10. Process Temperature (Max.): 85 degC
11. Ambient Temperature: (-5)-55 degC
12. Relative Humidity: 0-95%, non condensing
13. Intrinsically Safe: Yes
14. Lightning protection: Required

b) Transmitter:

1. Type: Smart Type
2. Enclosure: NEMA-4 & IP-65/ Zone 1 Gr. IIB & C
3. Enclosure Material: MFG Std.
4. Cable entry: 1/2" NPT F
5. Mounting: 2 inch Pipe
6. Power Supply: 24 VDC
7. Accuracy: ±1% of calibrated span
8. Output: 4-20 mA
9. Accessing Protocol: HART
10. Local Indicator: LCD
11. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines
12. Standard accessories

H) Differential Pressure Transmitter (For Sl. No. 73):

a) General:

1. Service: Gas
2. Maximum Working Pressure: 5 kg/cm²
3. Process Temperature (Max.): 85 degC
4. Ambient Temperature: (-5)-55 degC
5. Relative Humidity: 0-95%, non condensing
6. Intrinsically Safe: Yes
7. Lightning protection: Required

b) Transmitter:

1. Type: Smart Type
2. Enclosure: NEMA-4 & IP-65/Zone 1 Gr. IIB & C
3. Enclosure Material: MFG Std.
4. Wetted parts material: SS316/Hastelloy-C
6. Cable entry: 1/2" NPT F
7. Mounting: 2 inch Pipe
8. Installation: Horizontal impulse piping type
9. Calibration range: 0-5000 mmwc
10. Power Supply: 24 VDC
11. Accuracy: ±1% of calibrated span
12. Rangeability: 1:100 Max

13. Output: 4-20 mA
14. Accessing Protocol: HART
15. Local Indicator: LCD
16. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines

Accessories: Mounting Clamp, 5-way Manifold

I) Temperature Transmitter (For Sl. No. 74):

a) General:

1. Service: Heavy Oil / Heavy Oil+Gas
2. Temperature Range: 0-150 degC
3. Location: Field
4. Operating Pressure (Max.): 5.0 kg/cm²
5. Ambient Temperature: (-5)-55 degC
6. Relative Humidity: 0-95%, non condensing
7. Intrinsically Safe: Yes
8. Lightning protection: Required

b) Transmitter:

1. Type: Smart Type
2. Enclosure: NEMA-4 & IP-65/Zone 1 Gr. IIB & C
3. Enclosure Material/Housing: MFG Std.
4. Input: T/C-K type
5. Immersion Length: 400 mm - 2 nos. (Process Connection: 1 1/2" 150#RF,SS316)
200 mm- 2 nos. (Process Connection: 1" NPT M,SS316)
6. Cable entry: 1/2" NPT F
7. Mounting: Head Mount
8. Power Supply: 24 VDC
9. Accuracy: ±0.2% of span
10. Cold Junction: ±0.5 degC for every 25 degC in ambient temperature
11. Output: 4-20 mA
12. Accessing Protocol: HART
13. Integral indicator: Digital indicator
14. Approval: DGMS certified for use in Zone-1 & Zone-2 hazardous area of Oil Mines

Accessories: K type Thermocouple, standard accessories

J) Gate Valve, Size : 150 mm (6") Nominal Bore, API 6D ANSI-150 Class rating (For Sl. No. 55):

Hand wheel operated, Full Bore, rising stem, Bolted Bonnet, Double Disc parallel expandable Gate with parallel seating arrangements, Flanged ends having serrated raised face, complete with Weld neck type raised face Companion Flanges as per ASME B 16.5, Flat gasket, Studs and Nuts.

The Valve should have back-seat arrangements. Manufacturing and Testing Standard of Valves - API 600 and API-598 respectively. Body and Bonnet shall be of cast carbon steel as per ASTM A216 Gr. WCB. Stem, Gate segments and Seat shall be of AISI 410 SS Nitro-hardened with HF-7.

K) Gate Valve, Size : 100 mm (4") Nominal Bore, API 6D ANSI-150 Class rating (For Sl. No. 56):

Hand wheel operated, Full Bore, rising stem, Bolted Bonnet, Double Disc parallel expandable Gate with parallel seating arrangements, Flanged ends having serrated raised face, complete with Weld neck type raised face Companion Flanges as per ASME B 16.5, Flat gasket, Studs and Nuts.

The Valve should have back-seat arrangements. Manufacturing and Testing Standard of Valves - API 600 and API-598 respectively. Body and Bonnet shall be of cast carbon steel as per ASTM A216 Gr. WCB. Stem, Gate segments and Seat shall be of AISI 410 SS Nitro-hardened with HF-7.

L) Gate Valve, Size : 50 mm (2") Nominal Bore, API 6D ANSI-150/ANSI-300 Class rating (For Sl. No. 57 & 58):

Hand wheel operated, Full Bore, rising stem, Bolted Bonnet, Double Disc parallel expandable Gate with parallel seating arrangements, Flanged ends having serrated raised face, complete with Weld neck type raised face Companion Flanges as per ASME B 16.5, Flat gasket, Studs and Nuts. The Valve should have back-seat arrangements. Manufacturing and Testing Standard of Valves - API 600 and API-598 respectively. Body and Bonnet shall be of cast carbon steel as per ASTM A216 Gr. WCB. Stem, Gate segments and Seat shall be of AISI 410 SS Nitro-hardened with HF-7.

PROFORMA – II

PRICE SCHEDULE FORMAT

OPERATION & MAINTENANCE OF OIL's INSTALLATIONS AT BAGHEWALA

(FOR THE PURPOSE OF COMMERCIAL EVALUATION OF BIDS)

Sl. No	Description of item	Quantity	Unit	Unit Rates	Total Amount
1	<u>MOB-DEMOB CHARGES : (One Time lump sum)</u>				
i)	Mobilisation charge (M)	Lump-sum	One		
ii)	Demobilisation charge (D)	Lump-sum	One		
I)	Total Mob & De-mob charges: (i) + (ii) under Srl. No. 1.0 above				

II	OPERATING AND MAINTENANCE CHARGES : _						
Sl. No.	Description of Services	Unit	Qty.	Combined O & M	Break-up of		Extended Value (7)= (4X5)
				Unit Rates	O & M		
				(5)=(6.1+6.2)	Unit Rates		
1	2	3	4		6		
					Operational Charges 6.1	Maintenance Charges 6.2	
A.	Operation and Maintenance (O&M) Rates :						
1. a	Monthly lump sum O&M charges for Installations	Month	12		x	x	

	(1stYear)						
	Monthly lump sum O&M charges for Installations (2nd Year)	Month	12		x	x	
B.	Force Majeure Day Rate :						
1.a	Force Majeure Day Rate for Installations (1st Year)	Days	10		x		
	Force Majeure Day Rate for Installations (2nd Year)	Days	10		x		
C.	Standby Day Rate:						
1.a	Standby Day Rate for Installations (1st Year)	Days	30		x		
	Standby Day Rate for Installations (2nd Year)	Days	30		x		
D.	Maintenance Day Rate: (During scheduled shutdown only)						
1.a	Maintenance Day Rate for Installations (1st Year)	Days	30		x		
	Maintenance Day Rate for Installations (2nd Year)	Days	30		x		
E.	OPTIONAL: Additional Well Site O&M Day Rate:						
1.a	O&M Day Rate for Well Site (1st Year)	Days	1200		x	x	
	O&M Day Rate for Well Site (2nd Year)	Days	1200		x	x	
F	Manpower Charges						

Production Operator	No	1				
Mechanical Technician	No	1				
Instrument Technician	No	1				
Electrical Technician	No	1				
1st Class Boiler Attendant	No	1				
2nd Class Boiler Attendant	No	1				

II. Total O & M Charges: Sum Total of Column (7) above.

B. Total Estimated Value of the O&M Contract for evaluation purpose = Sum total of (I+II) = B

Grand Total Estimated Value of the Contract for Evaluation Purpose T = A+B

Note:

NOTE:

1. Break-up of charges towards operations and maintenance to be shown separately as called for.
2. Bidder shall note that no other charges apart from above shall be paid by COMPANY for providing the services mentioned under 5. SCOPE OF WORK of Section-I. Therefore, charges apart from above, if any, Bidder shall load in the above rates.
3. Assumptions made in respect of the number of days/parameters above for various operations are only for the purpose of evaluation of the bids. The Operator/ Contractor will be paid on the basis of the actual number of days/parameters, as the case may be.
4. Rates quoted above must be inclusive of all taxes, duties and levies excluding Goods & Service Tax etc. However, the quantum included towards same must be indicated separately.
5. Quoted rates must be in compliance to following stipulations.
 - a. Mobilization charges should not be more than 7.5 % Of the contract value and Demobilization Charges should not be more than 5 % of the total evaluated contract value for 1st year of O&M.
 - b. Standby day rate shall not exceed 85% of the respective operating & maintenance day rate on pro-rata basis.
 - c. Force Majeure day rate shall not exceed 80% of the respective operating and maintenance day rate on pro-rata basis.

SECTION – IV

GENERAL CONDITIONS OF CONTRACT

1.0 DEFINITIONS:

1.1 In the contract, the following terms shall be interpreted as indicated:

- (a) "The Contract" means agreement entered into between Company and Contractor, as recorded in the contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein;
- (b) "The Contract Price" means the price payable to Contractor under the contract for the full and proper performance of its contractual obligations;
- (c) "Company" or "OIL" means Oil India Limited;
- (d) "Contractor" means the Contractor performing the work under this Contract.
- (e) "Contractor's Personnel" means the personnel to be provided by the Contractor to provide services as per the contract.
- (f) "Company's Personnel" means the personnel to be provided by OIL or OIL's Contractor (other than the Contractor executing the Contract). The Company representatives of OIL are also included in the Company's personnel.
- (g) "Contractor's items" means the equipment, materials and services, which are to be provided by Contractor or to be provided by Company at the expense of the Contractor, which are listed in Tender Document under Terms of Reference and Technical Specifications.
- (h) "Company's items" means the equipment, materials and services, which are to be provided by Company at the expense of Company and listed in the Contract.
- (i) "Company Representative" means the person or persons appointed and approved from time to time by the Company to act on its behalf for overall coordination and project management purpose.
- (j) "The Work" means each and every activity required for the successful performance of the services described in Section II, the Terms of Reference.
- (k) "Day" means a calendar day of twenty-four (24) consecutive hours beginning at 07:00 hrs. and ending at 07:00 hrs.
- (l) "Party" means either the Company or Contractor as the context so permits and, as expressed in the plural, shall mean the Company and Contractor collectively.
- (m) "Site" means the land and other places, on/under/ in or through which the works are to be executed by the Contractor and any other land and places provided by the Company for working space or any other purpose as designated hereinafter as forming part of the Site.

(n) "Gross Negligence" means any act or failure to act (whether sole, joint or concurrent) by a person or entity which was intended to cause, or which was in reckless disregard of or wanton indifference to, avoidable and harmful consequences such person or entity knew, or should have known, would result from such act or failure to act. Notwithstanding the foregoing, Gross negligence shall not include any action taken in good faith for the safeguard of life or property.

(o) "Willful Misconduct" means intentional disregard of good and prudent standards of performance or proper conduct under the Contract with knowledge that it is likely to result in any injury to any person or persons or loss or damage of property.

(p) "Affiliate" means any Person which Controls, or is Controlled by, or under common Control with a Party; "Control" in this context means ownership of more than fifty percent (50%) of the shares of a Person and/or the right to appoint majority directors on Board by contract or otherwise.

(q) "Co-venturers" shall mean any co-venturers with the Company from time to time having an interest in either the PSC and/or a Joint and/or associated contracts for the purposes of exploration and production in Operating Contract the Operating Area and on whose behalf the Company would be deemed to have entered into this Contract.

2.0 EFFECTIVE DATE, MOBILISATION TIME/DE-MOBILIZATION TIME, DATE OF COMMENCEMENT OF THE CONTRACT AND DURATION OF CONTRACT:

2.1 EFFECTIVE DATE OF CONTRACT : The contract shall become effective as of the date Company notifies the Contractor in writing that it has been awarded the contract. This date of issuance of Letter of Award(LOA) by the Company will be the Effective Date of Contract.

2.2 MOBILISATION/De-MOBILISATION TIME OF THE CONTRACT: The Contractor must complete initial mobilization within 30 DAYS of LOA/Mobilization advice from Company.

2.3 DATE OF COMMENCEMENT OF CONTRACT: The date on which the mobilization is completed in all respects will be treated as date of Commencement of Contract.

2.4 DURATION OF CONTRACT: The contract shall be valid for a period of Three(03) months for Revival (Part –A) from the Date of Commencement of the Contract and subsequently for a period of Two (02) years for Operation & Maintenance and shall have provision of extension by another one(01) year.

3.0 GENERAL OBLIGATIONS OF CONTRACTOR : Contractor shall, in accordance with and subject to the terms and conditions of this Contract:

3.1 Perform the work described in the Terms of Reference (Part-3, Section-II) in most economic and cost effective way.

3.2 Except as otherwise provided in the Terms of Reference and the Special Conditions of the Contract, provide all labour as required to perform the work.

3.3 Perform all other obligations, work and services which are required by the terms of this contract or which reasonably can be implied from such terms as being necessary for the successful and timely completion of the work.

3.4 Contractor shall be deemed to have satisfied himself before submitting their bid as to the correctness and sufficiency of its bid for the services required and of the rates and prices quoted, which rates and prices shall, except insofar as otherwise provided, cover all its obligations under the contract.

3.5 Contractor shall give or provide all necessary supervision during the performance of the services and as long thereafter within the warranty period as Company may consider necessary for the proper fulfilling of contractor's obligations under the contract.

4.0 GENERAL OBLIGATIONS OF THE COMPANY: Company shall, in accordance with and subject to the terms and conditions of this contract:

4.1 Pay Contractor in accordance with terms and conditions of the contract. The period of time for which each rate shall be applicable shall be computed from and to the nearest an hour. The rates contained in the Contract shall be based on Contractor's operation being conducted on a seven (07) days week and a twenty-four (24) hours work day. Under the Contract, Contractor will be entitled to the applicable rate defined in PROFORMA – I & II of Section -III. These rates are payable when the required condition has existed for a full 24 hours period. If the required condition existed for less than 24 hours then payments shall be made on pro-rata basis.

4.2 Allow Contractor access, subject to normal security and safety procedures, to all areas as required for orderly performance of the work.

4.3 Perform all other obligations required of Company by the terms of this contract.

5.0 PERSONNEL TO BE DEPLOYED BY CONTRACTOR

5.1 Contractor warrants that it shall provide competent, qualified and sufficiently experienced personnel to perform the work correctly and efficiently.

5.2 The Contractor should ensure that their personnel observe applicable company and statutory safety requirement. Upon Company's written request, Contractor, entirely at his own expense, shall remove immediately any personnel of the Contractor determined by the Company to be unsuitable and shall promptly replace such personnel with personnel acceptable to the Company. Replacement personnel should be mobilized within ten(10) days from the date of issuance of notice without affecting the operation of the company.

5.3 The Contractor shall be solely responsible throughout the period of the contract for providing all requirements of their personnel including but not limited to, their transportation to & fro from field/drilling site, enroute/ local boarding, lodging & medical attention etc. Company shall have no responsibility or liability in this regard.

5.4 Contractor's key personnel shall be fluent in English language (both writing and speaking).

6.0 WARRANTY AND REMEDY OF DEFECTS

6.1 Contractor warrants that it shall perform the work in a professional manner and in accordance with their highest degree of quality, efficiency, and with the state of the art technology/inspection services and in conformity with all specifications, standards and drawings set forth or referred to in the Technical Specifications. They should comply with the instructions and guidance, which Company may give to the Contractor from time to time.

6.2 Should Company discover at any time during the tenure of the Contract or till the Unit/equipment/tools are demobilised from site or base camp(if applicable) that the work does not conform to the foregoing warranty, Contractor shall after receipt of notice from Company, promptly perform any and all corrective work required to make the services conform to the Warranty. Such corrective Work shall be performed entirely at Contractor's own expenses. If such corrective Work is not performed within a reasonable time, the Company, at its option may have such remedial Work performed by others and charge the cost thereof to Contractor subject to a maximum of the contract value payable for the defective work which needs corrective action which the Contractor must pay promptly. In case Contractor fails to perform remedial work, or pay promptly in respect thereof, the performance security shall be forfeited.

7.0 CONFIDENTIALITY, USE OF CONTRACT DOCUMENTS AND INFORMATION:

7.1 Contractor shall not, without Company's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing pattern, sample or information furnished by or on behalf of Company in connection therewith, to any person other than a person employed by Contractor in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance with prior permission from Company. However, nothing hereinabove contained shall deprive the Contractor of the right to use or disclose any information:

(a) which is possessed by the Contractor, as evidenced by the Contractor's written records, before receipt thereof from the Company which however the Contractor shall immediately inform to Company ; or

(b) which is required to be disclosed by the Contractor pursuant to an order of a court of competent jurisdiction or other governmental agency having the power to order such disclosure, provided the Contractor uses its best efforts to provide timely notice to Company of such order to permit Company an opportunity to contest such order subject to prior permission from Company.

7.2 Contractor shall not, without Company's prior written consent, make use of any document or information except for purposes of performing the contract.

7.3 Any document supplied to the Contractor in relation to the contract other than the Contract itself remain the property of Company and shall be returned (in

all copies) to Company on completion of Contractor's performance under the Contract if so required by Company.

7.4 During this Contract, Company and its employees, agents, other contractors, sub-contractors (of any tier) and their employees etc may be exposed to certain confidential information and data of the Contractor. Such information and data shall held by the Company, its employees, agents, other contractors, sub-contractors (of any tier) and their employees in the strictest Confidence and shall not be disclosed to any other party except on a need to know basis.

7.5 However, the above obligation shall not extend to information which:

- i) is, at the time of disclosure, known to the public which Contractor shall immediately inform Company ;
- ii) is lawfully becomes at a later date known to the public through no fault of Contractor subject to Contractor's undertaking that no information has been divulged by them to the public;
- iii) is lawfully possessed by Contractor before receipt thereof from Company which should be immediately informed to Company;
- iv) is developed by Contractor independently of the information disclosed by Company which should be shared with the Company;
- v) Contractor is required to produce before competent authorities or by court order subject to prior permission from Company;

8.0 TAXES:

8.1 Tax levied on Contractor as per the provisions of Indian Income Tax Act and any other enactment/rules on income derived/payments received under the contract will be on Contractor's account.

8.2 Contractor shall be responsible for payment of personal taxes, if any, for all the personnel deployed in India by Contractor.

8.3 The Contractor shall furnish to the Company, if and when called upon to do so, relevant statement of accounts or any other information pertaining to work done under the contract for submitting the same to the Tax authorities, on specific request from them in accordance with provisions under the law. Other than the information provided by the Contractor, the Contractor shall not be responsible for any inaccurate information provided by the Company to the Tax authorities and the Company shall indemnify the Contractor for all claims, expenses, costs or losses of any nature arising from such inaccuracy. Contractor shall be responsible for preparing and filing the return of income etc. within the prescribed time limit to the appropriate authority.

8.4 Prior to start of operations under the contract, the Contractor shall furnish the Company with the necessary documents, as asked for by the Company and/ or any other information pertaining to the contract, which may be required to be

submitted to the Income Tax authorities at the time of obtaining "No Objection Certificate" for releasing payments to the Contractor.

8.5 Corporate income tax will be deducted at source from the invoice at the specified rate of income tax as per the provisions of Indian Income Tax Act as may be in force from time to time and Company will issue TDS Certificate to the Contractor as per the provisions of Income Tax Act.

8.6 Corporate and personnel taxes on Contractor shall be the liability of the Contractor and the Company shall not assume any responsibility on this account.

8.7 All taxes and levies other than GST and customs duty on purchases and sales made by Contractor shall be borne by the Contractor.

8.8 **Goods and Services Tax (GST):** The quoted price should be exclusive of GST and the GST as applicable shall be to the Company account. The GST amount on the taxable part of the services provided by the Contractor shall be paid by the Company as per provisions of the GST Act. Bidder should take note of the following while submitting their offer in GST regime.

GOODS AND SERVICES TAX :

1. "GST" shall mean Goods and Services Tax charged on the supply of material(s) and services. The term "GST" shall be construed to include the Integrated Goods and Services Tax (hereinafter referred to as "IGST") or Central Goods and Services Tax (hereinafter referred to as "CGST") or State Goods and Services Tax (hereinafter referred to as "SGST") or Union Territory Goods and Services Tax (hereinafter referred to as "UTGST") depending upon the import / interstate or intrastate supplies, as the case may be. It shall also mean GST compensation Cess, if applicable.

2. The quoted price shall be deemed to be inclusive of all taxes and duties except "Goods and Services Tax" (hereinafter called GST) (i.e. IGST or CGST and SGST/UTGST applicable in case of interstate supply or intra state supply respectively and GST compensation Cess if applicable).

3. Contractor/vendor shall be required to issue tax invoice in accordance with GST Act and/or Rules so that input credit can be availed by OIL (Oil India Limited)/Client. In the event that the contractor / vendor fails to provide the invoice in the form and manner prescribed under the GST Act read with GST Invoicing Rules thereunder, OIL / Client shall not be liable to make any payment on account of GST against such invoice.

4. GST shall be paid against receipt of tax invoice and proof of payment of GST to government. In case of non-receipt of tax invoice or non-payment of GST by the contractor/vendor, OIL shall withhold the payment of GST.

5. GST payable under reverse charge for specified services or goods under GST act or rules, if any, shall not be paid to the contractor/vendor but will be directly deposited to the government by OIL/Client.

6. Where OIL/client has the obligation to discharge GST liability under reverse charge mechanism and OIL/client has paid or is /liable to pay GST to the Government on which interest or penalties becomes payable as per GST laws for any reason which is not attributable to OIL/client or ITC with respect to such payments is not available to OIL/client for any reason which is not attributable to OIL/client, then OIL/client shall be entitled to deduct/ setoff / recover such amounts against any amounts paid or payable by OIL/Client to Contractor / Supplier.

7. The Supplier shall always comply with the requirements of applicable laws and provide necessary documents as prescribed under the Rules & Regulations, as applicable from time to time. In particular, if any tax credit, refund or other benefit is denied or delayed to OIL / Project Owner due to any non-compliance / delayed compliance by the Supplier under the Goods & Service Tax Act (such as failure to upload the details of the sale on the GSTN portal, failure to pay GST to the Government) or due to non-furnishing or furnishing of incorrect or incomplete documents by the Supplier, the Supplier shall be liable to reimburse OIL / Project Owner for all such losses and other consequences including, but not limited to the tax loss, interest and penalty.

8. Notwithstanding anything contained anywhere in the Agreement, in the event that the input tax credit of the GST charged by the Contractor / Vendor is denied by the tax authorities to OIL / Client for reasons attributable to Contractor / Vendor, OIL / client shall be entitled to recover such amount from the Contractor / Vendor by way of adjustment from the next invoice. In addition to the amount of GST, OIL / client shall also be entitled to recover interest at the rate prescribed under GST Act and penalty, in case any penalty is imposed by the tax authorities on OIL / Project Owner.

9. TDS under GST, if applicable, shall be deducted from contractor's/vendor's bill at applicable rate and a certificate as per rules for tax so deducted shall be provided to the contractor/vendor.

10. The Contractor will be under obligation for charging correct rate of tax as prescribed under the respective tax laws. Further the Contractor shall avail and pass on benefits of all exemptions/ concessions available under tax laws.

11. The contractor will be liable to ensure to have registered with the respective tax authorities and to submit self-attested copy of such registration certificate(s) and the Contractor will be responsible for procurement of material in its own registration (GSTIN) and also to issue its own Road Permit/ E-way Bill, if applicable etc.

12. In case the bidder is covered under Composition Scheme under GST laws, then bidder should quote the price inclusive of the GST (CGST & SGST/UTGST or IGST). Further, such bidder should mention "Cover under composition system" in column for GST (CGST & SGST/UTGST or IGST) of price schedule.

13. OIL/client will prefer to deal with registered supplier of goods/ services under GST. Therefore, bidders are requested to get themselves registered under GST, if not registered yet. However, in case any unregistered bidder is submitting their

bid, their prices will be loaded with applicable GST while evaluation of bid. Where OIL/client is entitled for input credit of GST, the same will be considered for evaluation of bid as per evaluation methodology of tender document.

14. GST (GOODS & SERVICE TAX) (TRANSPORTATION CHARGES, SUPERVISION / TRAINING, SITE WORK):

The quoted Prices towards Transportation, Supervision, Training, Site Work, AMC shall be inclusive of all taxes & levies except Goods & Service Tax (GST).

Goods & Service Tax (GST) as billed by the Supplier shall be payable at actuals by Owner subject to Contractor furnishing proper tax invoice issued in accordance with Goods & Service Tax (GST) rules to enable Owner to take input tax credit as per Govt. Rules 2004 on Goods & Service Tax (GST) paid.

Goods & Service Tax (GST) shall not be payable, if the requirements as specified above are not fulfilled by the Supplier. In case of non-receipt of above, Owner shall withhold the payment of Goods & Service Tax (GST).

In case of Foreign Bidders, where foreign bidder does not have permanent establishment in India, for supervision/training services by foreign supervisor at Project Site, Goods & Service Tax (GST) shall be paid by Owner to tax authorities.

15. Documentation requirement for GST

The vendor will be under the obligation for invoicing correct tax rate of tax/duties as prescribed under the GST law to Owner/OIL, and pass on the benefits, if any, after availing input tax credit.

Any invoice issued shall contain the following particulars-

- a) Name, address and GSTIN of the supplier;
- b) Serial number of the invoice;
- c) Date of issue;
- d) Name, address and GSTIN or UIN, if registered of the recipient;
- e) Name and address of the recipient and the address of the delivery, along with the State and its code,
- f) HSN code of goods or Accounting Code of services;
- g) Description of goods or services;
- h) Quantity in case of goods and unit or Unique Quantity Code thereof;
- i) Total value of supply of goods or services or both;
- j) Taxable value of supply of goods or services or both taking into discount or abatement if any;
- k) Rate of tax (IGST, CGST, SGST/ UTGST, cess);
- l) Amount of tax charged in respect of taxable goods or services (IGST, CGST, SGST/ UTGST, cess);
- m) Place of supply along with the name of State, in case of supply in the course of inter-state trade or commerce;
- n) Address of the delivery where the same is different from the place of supply and
- o) Signature or digital signature of the supplier or his authorised representative.

GST invoice shall be prepared in triplicate, in case of supply of goods, in the following manner-

- a) The original copy being marked as ORIGINAL FOR RECIPIENT;
- b) The duplicate copy being marked as DUPLICATE FOR TRANSPORTER and
- c) The triplicate copy being marked as TRIPLICATE FOR SUPPLIER.

In case of any advance given against any supplies contract, the supplier of the goods shall issue Receipt Voucher containing the details of details of advance taken along with particulars as mentioned in clause no. 15. (a), (b), (c), (d), (g), (k), (l), (m) & (o) above.

16. GENERAL REMARKS ON TAXES & DUTIES:

In view of GST Implementation from 1st July 2017, all taxes and duties including Excise Duty, CST/VAT, Service tax, Entry Tax and other indirect taxes and duties have been submerged in GST. Accordingly reference of Excise Duty, Service Tax, VAT, Sales Tax, Entry Tax, E1/E2 Forms, and any other form of indirect tax except of GST mentioned in the bidding document shall be ignored.

8.9 Oil India Ltd., Rajasthan Project's GST provisional ID No. : 08AAACO2352C1ZX

9.0 **INSURANCE:**

9.1 The Contractor shall arrange insurance to cover all risks in respect of their personnel, materials and equipment (except when tools / equipment are below Rotary Table or in the well bore) belonging to the Contractor or its subcontractor (if applicable) during the currency of the contract including the third party items/consumables. For materials/equipment belong to the Contractor or its sub-contractor, Contractor may self-insure the same.

9.2 Contractor shall at all time during the currency of the contract provide, pay for and maintain the following insurance amongst others except when tools/ equipment are below Rotary Table or in the well bore :

- a) Workmen compensation insurance as required by the laws of the country of origin of the employee.
- b) Employer's Liability Insurance as required by law in the country of origin of employee.
- c) General Public Liability Insurance or Comprehensive General Liability insurance covering liabilities including contractual liability for bodily injury, including death of persons, and liabilities for damage of property. This insurance must cover all operations of Contractor required to fulfil the provisions under this contract.
- d) Contractor's equipment used for execution of the work hereunder shall have an insurance cover with a suitable limit (as per international standards) except when tools /equipment are below Rotary Table or in the well bore or Contractor may self-insure its tools/ equipment.
- e) Automobile Public Liability Insurance covering owned and hired automobiles used in the performance of the work hereunder, with bodily injury limits and property damage limits as governed by Indian Insurance regulations.
- f) Public Liability Insurance as required under Public Liability Insurance Act 1991, "if applicable".

9.3 Any deductible set forth in any of the above insurance shall be borne by Contractor.

9.4 Contractor shall furnish to Company prior to commencement date, certificates of all its insurance policies covering the risks mentioned above.

9.5 If any of the above policies expire or are cancelled during the term of this contract and Contractor fails for any reason to renew such policies, then the Company will renew/replace same and charge the cost thereof to Contractor. Should there be a lapse in any insurance required to be carried out by the Contractor for any reason whatsoever, loss/damage claims resulting there from shall be to the sole account of Contractor.

9.6 Contractor shall require all of his sub-Contractor to provide such of the foregoing insurance coverage as Contractor is obliged to provide under this Contract and inform the Company about the coverage prior to the commencement of agreements with its sub-Contractors.

9.7 All insurance taken out by Contractor or their sub-contractor shall be endorsed to provide that the underwriters waive their rights of recourse on the Company and to the extent of the liabilities assumed by Contractor under this Contract.

9.8 Contractor shall obtain additional insurance or revise the limits of existing insurance as per Company's request in which case additional cost shall be to Contractor's account.

10.0 **CHANGES:**

10.1 During the performance of the work, Company may make minor change to take care of any supplementary work within the general scope of this Contract including, but not limited to, changes in methodology, and minor additions to or deletions from the work to be performed. Contractor shall perform the work as changed. Changes of this nature will be affected by written order by the Company.

10.2 If any change result in an increase in compensation due to Contractor or in a credit due to Company, Contractor shall submit to Company an estimate of the amount of such compensation or credit in a form prescribed by Company. Such estimates shall be based on the rates shown in the Schedule of Rates (Part-3, Section IV). Upon review of Contractor's estimate, Contractor shall establish and set forth in the Change Order the amount of the compensation or credit for the change or a basis for determining a reasonable compensation or credit for the change. If Contractor disagrees with compensation or credit set forth in the Change Order, Contractor shall nevertheless perform the work as changed, and the parties will resolve the dispute in accordance with Clause 13 hereunder. Contractor's performance of the work as changed will not prejudice Contractor's request for additional compensation for work performed under the Change Order.

11.0 **FORCE MAJEURE :**

11.1 In the event of either party being rendered unable by 'Force Majeure' to

perform any obligation required to be performed by them under the contract, the relative obligation of the party affected by such 'Force Majeure' will stand suspended for the period during which such cause lasts. The word 'Force Majeure' as employed herein shall mean acts of God, war, revolt, agitation, strikes, riot, fire, flood, sabotage, civil commotion, road barricade (but not due to interference of employment problem of the Contractor), acts of government of the two parties, which makes performance impossible or impracticable and any other cause, whether of kind herein enumerated or otherwise which are not within the control of the party to the contract and which renders performance of the contract by the said party impossible.

11.2 Upon occurrence of such cause and upon its termination, the party alleging that it has been rendered unable as aforesaid thereby, shall notify the other party in writing within seventy two (72) hours of the alleged beginning and ending thereof, giving full particulars and satisfactory evidence in support of its claim.

11.3 Should 'force majeure' condition as stated above occurs and should the same be notified within seventy two (72) hours after its occurrence the 'force majeure' rate shall apply for the first fifteen(15) days. Parties will have the right to terminate the Contract if such 'force majeure' conditions continue beyond fifteen (15) days with prior written notice. Should either party decide not to terminate the Contract even under such condition, no payment would apply after expiry of fifteen(15) days force majeure period unless otherwise agreed to.

12.0 TERMINATION:

12.1 **TERMINATION ON EXPIRY OF THE TERMS (DURATION):** This contract shall be deemed to have been automatically terminated on the expiry of duration of the contract, thereof.

12.2 **TERMINATION ON ACCOUNT OF FORCE MAJEURE:** Either party shall have the right to terminate this Contract on account of Force Majeure as set forth in Article 11.0 above.

12.3 **TERMINATION ON ACCOUNT OF INSOLVENCY:** In the event that the Contractor or its collaborator at any time during the term of the Contract, becomes insolvent or makes a voluntary assignment of its assets for the benefit of creditors or is adjudged bankrupt, then the Company shall, by a notice in writing have the right to terminate the Contract and all the Contractor's rights and privileges hereunder, shall stand terminated forthwith.

12.4 **TERMINATION FOR UNSATISFACTORY PERFORMANCE:** If the Company considers that, the performance of the Contractor is unsatisfactory, or not upto the expected standard, the Company shall notify the Contractor in writing and specify in details the cause of the dissatisfaction. The Company shall have the option to terminate the Contract by giving 15 days notice in writing to the Contractor, if Contractor fails to comply with the requisitions contained in the said written notice issued by the Company.

12.5 **TERMINATION DUE TO CHANGE OF OWNERSHIP & ASSIGNMENT:** In case the Contractor's rights and /or obligations under this Contract and/or the Contractor's rights, title and interest to the equipment/ material, are transferred or assigned without the Company's consent, the Company may at its absolute discretion, terminate this Contract.

12.6 TERMINATION DUE TO NON-AVAILABILITY OF EQUIPMENT/PERSONNEL : If at any time during the term of this Contract, breakdown of Contractor's equipment results in Contractors being unable to perform their obligations hereunder for a period of 15 successive days, Company at its option, may terminate this Contract in its entirety without any further right or obligation on the part of the Company, except for the payment of money then due. No notice shall be served by the Company under the condition stated above.

12.7 Notwithstanding any provisions herein to the contrary, the Contract may be terminated at any time by the company on giving 15 (fifteen) days written notice to the Contractor due to any other reason not covered under the above clause from 12.1 to 12.6 and in the event of such termination the Company shall not be liable to pay any cost or damage to the Contractor except for payment of services as per the Contract upto the date of termination including the Demob cost, if any.

12.8 CONSEQUENCES OF TERMINATION:

In all cases of termination herein set forth, the relative obligations of the parties to the Contract shall be limited to the period up to the date of termination. Notwithstanding the termination of this Contract, the parties shall continue to be bound by the provisions of this Contract that reasonably require some action or forbearance after such termination.

12.9 Upon termination of this Contract, Contractor shall return to Company all of Company's items, which are at the time in Contractor's possession.

12.10 In the event of termination of contract, Company will issue Notice of termination of the contract with date or event after which the contract will be terminated. The contract shall then stand terminated and the Contractor shall demobilize their personnel & materials.

13.0 SETTLEMENT OF DISPUTES AND ARBITRATION:

13.1 Arbitration(Applicable for Suppliers/Contractors other than PSU) :

Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, in connection with construction, meaning, operation, effect, interpretation of the contract or breach thereof which parties are unable to settle mutually, the same shall be referred to Arbitration as provided hereunder:

1. A party wishing to commence arbitration proceeding shall invoke Arbitration Clause by giving 30 days notice to the other party. The notice invoking arbitration shall specify all the points of dispute with details of the amount claimed to be referred to arbitration at the time of invocation of arbitration and not thereafter. If the claim is in foreign currency, the claimant shall indicate its value in Indian Rupee for the purpose of constitution of the arbitral tribunal.

2. The number of arbitrators and the appointing authority will be as under:

<u>Claim amount (excluding claim for interest and counter claim, if any)</u>	<u>Number of Arbitrator</u>	<u>Appointing Authority</u>
Upto INR 5 Crore	Sole Arbitrator	OIL
Above INR 5 Crore	3 Arbitrators	One Arbitrator by each party and the 3rd Arbitrator, who shall be the presiding Arbitrator, by the two Arbitrators.

3. The parties agree that they shall appoint only those persons as arbitrators who accept the conditions of the arbitration clause. No person shall be appointed as Arbitrator or Presiding Arbitrator who does not accept the conditions of the arbitration clause.

4. Parties agree that there will be no objection if the Arbitrator appointed holds equity shares of OIL and/or is a retired officer of OIL/any PSU. However, neither party shall appoint its serving employees as arbitrator.

5. If any of the Arbitrators so appointed dies, resigns, becomes incapacitated or withdraws for any reason from the proceedings, it shall be lawful for the concerned party/arbitrators to appoint another person in his place in the same manner as aforesaid. Such person shall proceed with the reference from the stage where his predecessor had left if both parties consent for the same ; otherwise, he shall proceed de novo.

6. Parties agree that neither shall be entitled for any pre-reference or pendente-lite interest on its claims. Parties agree that any claim for such interest made by any party shall be void.

7. The arbitral tribunal shall make and publish the award within time stipulated as under:

<u>Amount of Claims and counter claims(excluding interest)</u>	<u>Period for making and publishing of the award(counted from the date of first meeting of the Arbitrators)</u>
Upto INR 5 Crore	Within 8 months
Above INR 5 Crore	Within 12 months

The above time limit can be extended by Arbitrator, for reasons to be recorded in writing, with the consent of the other parties.

8. If after commencement of the arbitration proceedings, the parties agree to settle the dispute mutually or refer the dispute to conciliation, the arbitrators shall put the proceedings in abeyance until such period as requested by the parties.

9. Each party shall be responsible to make arrangements for the travel and stay etc. of the arbitrator pointed by it. Claimant shall also be responsible for making arrangements for travel/stay arrangements of the Presiding Arbitrator and the expenses incurred shall be shared equally by the parties.

In case of sole arbitrator, OIL shall make all necessary arrangements for his travel, stay and the expenses incurred shall be shared equally by the parties.

10. The Arbitration shall be held at the place from where the contract has been awarded. However, parties to the contract can agree for a different place for the convenience of all concerned.

11. The Arbitrator(s) shall give reasoned and speaking award and it shall be final and binding on the parties.

12. Subject to aforesaid, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof shall apply to the arbitration proceedings under this clause.

13.2 Arbitration (applicable in case of Contract awarded on Public Sector Enterprise):

In the event of any dispute or difference relating to, arising from or connected with the Contract, such dispute or difference shall be referred by either party to the arbitration of one of the Arbitrators in the Department of Public Enterprises, to be nominated by the Secretary to the Government of India, In-Charge of the Bureau of Public Enterprises. The Arbitration and Conciliation Act 1996 shall not be applicable to the Arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Deptt. of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference, the dispute shall be decided by the Law Secretary or the Special Secretary/Additional Secretary, whose decision shall bind the parties finally and conclusively. The parties in the dispute will share equally the cost of the arbitration as intimated by the Arbitrator.

The venue of all arbitrations under both 13.1 & 13.2 will be Duliajan, Assam. The award made in pursuance thereof shall be binding on the parties.

14.0 NOTICES:

14.1 Any notice given by one party to other, pursuant to this Contract shall be sent in writing or by telex or Fax and confirmed in writing to the applicable address specified below:

a) **Company**

OIL INDIA LIMITED
2- A, DISTRICT SHOPPING CENTRE
SARASWATI NAGAR, BASNI,
JODHPUR-342005, RAJASTHAN
Fax No. 0291- 2727050

b) **Contractor**

Fax No. :

14.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

15.0 SUBCONTRACTING/ASSIGNMENT:

15.1 Contractor shall not subcontract, transfer or assign the contract, in full or any part under this contract, to any third party (ies). Except for the main services under this contract, Contractor may sub-contract the petty support services

subject to Company's prior approval. However, Contractor shall be fully responsible for complete execution and performance of the services under the Contract.

16.0 MISCELLANEOUS PROVISIONS:

16.1 Contractor shall give notices and pay all fees at their own cost required to be given or paid by any National or State Statute, Ordinance, or other Law or any regulation, or bye-law of any local or other duly constituted authority as may be in force from time to time in India, in relation to the performance of the services and by the rules & regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the services.

16.2 Contractor shall conform in all respects with the provisions of any Statute, Ordinance of Law as aforesaid and the regulations or bye-law of any local or other duly constituted authority which may be applicable to the services and with such rules and regulation public bodies and Companies as aforesaid and shall keep Company indemnified against all penalties and liability of every kind for breach of any such Statute, Ordinance or Law, regulation or bye-law.

16.3 During the tenure of the Contract, Contractor shall keep the site where the services are being performed reasonably free from all unnecessary obstruction and shall store or dispose of any equipment and surplus materials and clear away and remove from the site any wreckage, rubbish or temporary works no longer required. On the completion of the services, Contractor shall clear away and remove from the site any surplus materials, rubbish or temporary works of every kind and leave the whole of the site clean and in workmanlike condition to the satisfaction of the Company.

16.4 Key personnel cannot be changed during the tenure of the Contract except due to sickness/death/resignation of the personnel in which case the replaced person should have equal experience and qualification, which will be again subject to approval, by the Company.

17.0 LIQUIDATED DAMAGES FOR DEFAULT IN TIMELY MOBILISATION:

17.1 Time is the essence of this Contract. In the event of the Contractor's default in timely mobilization for commencement of operations within the stipulated period, the Contractor shall be liable to pay liquidated damages @ 1/2% of contract value including mobilization cost, per week or part thereof of delay subject to maximum of 7.5%. Liquidated Damages will be reckoned from the expiry date of the scheduled mobilisation period as defined in para 2.2 above.

17.2 If the Contractor fails to mobilise within 45 days after the stipulated date, then the Company reserves the right to cancel the Contract without any compensation whatsoever.

17.3 The parties agree that the sum specified above is not a penalty but a genuine pre-estimate of the loss/damage which will be suffered by OIL on account of delay/breach on the part of the Contractor and the said amount will be payable without proof of actual loss or damage caused by such delay/breach and without any demur and shall not be open for any dispute whatsoever.

18.0 **PERFORMANCE SECURITY:**

The Contractor has furnished to Company a Bank Guarantee No. _____ dated _____ issued by _____ for _____ (being 10% of 01 year estimated Contract Price) with validity of three (03) months beyond the contract period. The performance security shall be payable to Company as compensation for any loss resulting from Contractor's failure to fulfill their obligations under the Contract. In the event of extension of the Contract period, the validity of the bank guarantee shall be suitably extended by the Contractor. The bank guarantee will be discharged by Company not later than 30 days following its expiry.

19.0 **ASSOCIATION OF COMPANY'S PERSONNEL:** Company's engineer/chemist will be associated with the work throughout the operations. The Contractor shall execute the work with professional competence and in an efficient and workman like manner and provide Company with a standard of work customarily provided by reputed IP Survey Contractors to major international oil companies in the petroleum industry.

20.0 **LABOUR:** The recruitment of the labour shall be met from the areas of operation and wages will be according to the rates prevalent at the time which can be obtained from the District Authorities of the area. The facilities to be given to the labourers should conform to the provisions of labour laws as per contract Labour (Regulation and Abolition) Act, 1970.

21.0 **LIABILITY:**

21.1 Except as otherwise expressly provided, neither Company nor its servants, agents, nominees, Contractors, or sub-contractors shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss of or damage to the property of the Contractor and/or their Contractors or sub-contractors, irrespective of how such loss or damage is caused and even if caused by the negligence of Company and/or its servants, agent, nominees, assignees, contractors and sub-Contractors. The Contractor shall protect, defend, indemnify and hold harmless Company from and against such loss or damage and any suit, claim or expense resulting there from.

21.2 Neither Company nor its servants, agents, nominees, assignees, Contractors, sub-contractors or its Affiliates or Coventurers shall have any liability or responsibility whatsoever for injury to, illness, or death of any employee of the Contractor and/or of its Contractors or sub-contractor irrespective of how such injury, illness or death is caused and even if caused by the negligence of Company and/or its servants, agents nominees, assignees, Contractors and sub-contractors. Contractor shall protect, defend, indemnify and hold harmless Company from and against such liabilities and any suit, claim or expense resulting there from.

21.3 The Contractor hereby agrees to waive its right of recourse and further agrees to cause its underwriters to waive their right of subrogation against Company and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for loss or damage to the equipment of the Contractor and/or its sub-contractors and/or their employees when such loss or

damage or liabilities arises out of or in connection with the performance of the contract limited to the Contractor's liabilities agreed to under this Contract.

21.4 The Contractor hereby further agrees to waive its right of recourse and agrees to cause its underwriters to waive their right of subrogation against Company and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for injury to, illness or death of any employee of the Contractor and of its contractors, sub-contractors and/or their employees when such injury, illness or death arises out of or in connection with the performance of the contract limited to the Contractor's liabilities agreed to under this Contract.

21.5 Except as otherwise expressly provided, neither Contractor nor its servants, agents, nominees, Contractors or sub-contractors shall have any liability or responsibility whatsoever to whomsoever for loss of or damage to the equipment and/or loss or damage to the property of the Company and/or their Contractors or sub-contractors, irrespective of how such loss or damage is caused and even if caused by the negligence of Contractor and/or its servants, agents, nominees, assignees, Contractors and sub-contractors. The Company shall protect, defend, indemnify and hold harmless Contractor from and against such loss or damage and any suit, claim or expense resulting there from.

21.6 Neither Contractor nor its servants, agents, nominees, assignees, Contractors, sub-contractors shall have any liability or responsibility whatsoever to whomsoever for injury or illness, or death of any employee of the Company and/or of its Contractors or sub-contractors irrespective of how such injury, illness or death is caused and even if caused by the negligence of Contractor and/or its servants, agents, nominees, assignees, Contractors and sub-contractors. Company shall protect, defend indemnify and hold harmless Contractor from and against such liabilities and any suit, claim or expense resulting there from.

21.7 The Company agrees to waive its right of recourse and further agrees to cause its underwriters to waive their right of subrogation against Contractor and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for loss or damage to the equipment of Company and/or its contractors or sub-contractors when such loss or damage or liabilities arises out of or in connection with the performance of the contract.

21.8 The Company hereby further agrees to waive its right of recourse and agrees to cause it underwriters to waive their right of subrogation against Contractor and/or its underwriters, servants, agents, nominees, assignees, Contractors and sub-contractors for injury to, illness or death of any employee of the Company and of its Contractors, sub-contractors and/or their employees when such injury, illness or death arises out of or in connection with the performance of the Contract.

22.0 **LIMITATION OF LIABILITY:** Notwithstanding any other provisions herein to the contrary, except only in cases of wilful misconduct and / or criminal acts,

(a) Neither the Contractor nor the Company (OIL) shall be liable to the other, whether in Contract, tort, or otherwise, for any consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs.

(b) Notwithstanding any other provisions incorporated elsewhere in the contract, the aggregate liability of the Contractor in respect of this contract, whether under Contract, in tort or otherwise, shall not exceed 50% of the Annualized Contract Price, provided however that this limitation shall not apply to the cost of repairing or replacing defective equipment by the Contractor, or to any obligation of the Contractor to indemnify the Company with respect to Intellectual Property Rights.

(c) Company shall indemnify and keep indemnified Contractor harmless from and against any and all claims, costs, losses and liabilities in excess of the aggregate liability amount in terms of clause (b) above.

23.0 INDEMNITY AGREEMENT:

23.1 Except as provided hereof Contractor agrees to protect, defend, indemnify and hold Company harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Contractor's employees, agents, contractors and sub-contractors or their employees on account of bodily injury or death, or damage to personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

23.2 Except as provided hereof Company agrees to protect, defend, indemnify and hold Contractor harmless from and against all claims, suits, demands and causes of action, liabilities, expenses, cost, liens and judgments of every kind and character, without limit, which may arise in favour of Company's employees, agents, contractors and sub-contractors or their employees on account of bodily injury or death, or damage to personnel/property as a result of the operations contemplated hereby, regardless of whether or not said claims, demands or causes of action arise out of the negligence or otherwise, in whole or in part or other faults.

24.0 INDEMNITY APPLICATION: The indemnities given herein above, whether given by Company or Contractor shall be without regard to fault or to the negligence of either party even though said loss, damage, liability, claim, demand, expense, cost or cause of action may be caused, occasioned by or contributed to by the negligence, either sole or concurrent of either party.

24.1 The Contractor shall not make Company liable to reimburse the Contractor to the statutory increase in the wage rates of the contract labour appointed by the Contractor. Such statutory or any other increase in the wage rates of the contract labourer shall be borne by the Contractor.

24.2 Any permission from the Mines Directorate in connection with working in excess of 8 (eight) hours per day shift pattern by the Contractor shall have to be arranged by the Contractor before commencement of the

Contract, in consultation with the Company. Moreover, since the Contractor's personnel engaged shall be working under the Mines Act and Oil Mines Regulations, the Contractor shall have to obtain any other relevant permission from the Mines Directorate to engage their employees in compliance with various procedures as per Mines Act. In case of any breach of procedures under Mines Act the Contractor shall be held responsible and they shall bear all expenses arising as a result thereof.

24.3 The Contractor shall not engage labour below 18 (eighteen) years of age under any circumstances. Persons above 60 (sixty) years age also shall not be deployed except Manager / Superintendent.

24.4 Moreover, the Contractor should obtain and produce in advance to commencement of Work the following certificate / approvals:

- (i) Approval from DGMS / DDMS for shift patterns in excess of 8 hours.
- (ii) Total manpower list.
- (iii) License/certificate from specified electrical authorities for the rig and camp electrical personnel, if required.
- (iv) All certificates as per applicable laws including Mines Acts.
- (v) Regional Labour certificate, if required.

25.0 **ENTIRE CONTRACT:** This Contract contains the entire agreement between the Parties and supersedes any previous understandings, commitments, agreements or representations whatsoever, oral or written, pertaining to the subject matter hereof, provided that nothing in this Clause (Entire Contract) shall have effect to exclude or restrict the liability of either Party for fraud or fraudulent misrepresentation.

26.0 **RECORDS, REPORTS AND INSPECTION:** The Contractor shall, at all times, permit the Company and its authorised employees and representatives to inspect all the Work performed and to witness and check all the measurements and tests made in connection with the said work. The Contractor shall keep an authentic, accurate history and logs including safety records of each IP survey section with major items consumed, which shall be open at all reasonable times for inspection by the Company designated representatives and its authorised employees and representatives. The Contractor shall provide the Company designated representatives with a daily written report, on form prescribed by the Company showing details of operations during the preceding 24 hours and any other information related to the said IP survey requested by the Company whenever so requested. The Contractor shall not, without Company's written consent allow any third person(s) access to the said survey, or give out to any third person information in connection therewith.

27.0 **INSPECTION OF MATERIALS**

27.1 **INSPECTION BY CONTRACTOR:** The Contractor agrees to perform a visual inspection, using its personnel, of all materials and appliances furnished by the Company when delivered into Contractor's possession and shall notify Company's representative of any apparent defects observed therein so that Company may replace such defective materials or appliances. If Contractor fails to notify the Company of any apparent defects as provided above, it shall be conclusively

presumed that such materials and appliances are free from such apparent defect. Contractor shall not be liable for any loss or damage resulting from the use of materials or appliances furnished by the Company containing latent defects. Upon the termination of this Agreement, Contractor shall return to the Company at the Well- site all machinery, equipment, tools, spare parts and supplies received by Contractor from the Company or purchased by the Contractor for the Company's account and not used or consumed in the operations, in as good condition as when received by Contractor, normal wear & tear excepted. If damage to any of the Company's equipment is caused due to sole negligence of the Contractor, same will be repaired or replaced at Contractor's cost. Contractor shall, if requested by the Company also maintain or repair, at its cost, any of the Company's items, at the Drilling Unit which Contractor is qualified to and can maintain or repair with Contractor's normal complement of personnel and the equipment at the Drilling Unit provided however that the Company shall at its cost provide all spare parts and materials required to maintain or repair the Company's items. However, it shall remain the Company's basic responsibility and liability to ensure that such items are always in good workable condition.

27.2 INSPECTION BY OPERATOR: The Company shall have the right to inspect and reject for any valid cause any items furnished by Contractor and Contractor shall replace or repair at its sole expense such items so rejected with items free of defects, to the satisfaction of the Company.

28.0 ROYALTY AND PATENTS: Each party shall hold harmless and indemnify the other from and against all claim and proceedings for or on account of any patent rights, design, trade mark or other protected rights arising from any use of materials, equipment, processes, inventions and methods which have not been imposed on the attending party by the terms of the contract or the specifications or drawings forming part thereof.

29.0 PAYMENTS, MANNER OF PAYMENT, RATES OF PAYMENT:

29.1 Company shall pay to the Contractor during the term of the Contract the amount due from time to time calculated according to the rates of payment set and in accordance with other provisions hereof. No. other payments shall be due from company unless specifically provided for in the Contract. Payment to the third party supplier(s) of the items/consumables shall be made after receipt of goods at site in Rajasthan duly certified by authorized personnel of the Company. All payments will be made in accordance with the terms hereinafter described.

29.2 MANNER OF PAYMENT: All payments due by Company to Contractor hereunder shall be made at Contractor's designated bank. Bank charges, if any will be on account of the Contractor.

29.3 Payment of any invoices shall not prejudice the right of Company to question the validity of any charges therein, provided Company within one year after the date of payment shall make and deliver to Contractor written notice of objection to any item or items the validity of which Company questions.

29.4 INVOICES: Mobilization charges will be invoiced only upon completion of mobilization when the entire equipment, chemicals and personnel are ready at site for starting the job as certified by company representative. Payment of

mobilization charges shall be made within 45 days following the date of receipt of undisputed invoices by Company.

29.5 Contractor shall send invoice to company on the day following the end of each month for all daily or monthly charges due to the contractor.

29.6 Contractor shall submit three (03) sets of all invoices duly super scribed 'Original' and 'Copy' as applicable to the Company for processing payment. Separate invoices for the charges payable under the contract shall be submitted by the Contractor for foreign currency and Indian currency.

29.7 Payment of monthly invoices, if undisputed, shall be made within 30 days following the date of receipt of invoice by Company.

29.8 Company shall within 30 days of receipt of the invoice notify the Contractor of any item under dispute, specifying the reasons thereof, in which event, payment of the disputed amount may be withheld until settlement of the dispute, but payment shall be made of any undisputed portion on or before the due date. This will not prejudice the company's right to question the validity of the payment at a later date as envisaged in Clause 31.3 above.

29.9 The acceptance by Contractor of part payment on any billing not paid on or before the due date shall not be deemed a waiver of Contractor's rights in any other billing, the payment of which may then or thereafter be due.

29.10 Payment of final demobilization charges shall be made if applicable within 45 days on receipt of invoice by Company accompanied by the following documents from the Contractor :

- a) Audited account up to completion of the contract.
- b) Tax audit report for the above period as required under the Indian Tax Laws.
- c) Documentary evidence regarding the submission of returns and payment to taxes for the expatriate personnel engaged by the Contractor or by its Sub-contractor.
- d) Proof of re-export of all items including the unutilized spares and consumables (excepting consumables consumed during the contract period) and also cancellation of re-export bond if any.
- e) Any other documents as required by applicable Indian Laws.

In case, no demobilization charges are payable, the documents mentioned above will have to be submitted by the Contractor before release of the final payment by the Company. A certificate from Chartered Accountant on (a), (b) & (c) above will suffice

29.11 Contractor shall maintain complete and correct records of all information on which contractor's invoice are based upto 2 (two) years from the date of last invoice. Such records shall be required for making appropriate adjustments or payments by either party in case of subsequent audit query / objection.

30.0 APPLICABLE LAW:

30.1 The Contract shall be deemed to be a Contract made under, governed by and construed in accordance with the laws of India for the time being in force and shall be subject to the exclusive jurisdiction of Courts situated in Jodhpur, Rajasthan.

30.2 The Contractor shall ensure full compliance of various Indian Laws and Statutory Regulations, to the extent applicable, as stated below, but not limited to, in force from time to time and obtain necessary permits/ licenses etc. from appropriate authorities for conducting operations under the Contract:

- a) The Mines Act 1952- as applicable to safety and employment conditions
- b) The Minimum Wages Act, 1948
- c) The Oil Mines Regulations, 1984
- d) The Workmen's Compensation Act, 1923
- e) The Payment of Wages Act, 1963
- f) The Payment of Bonus Act, 1965
- g) The Contract Labour (Regulation & Abolition) Act, 1970 and the rules framed there under
- h) The Employees Pension Scheme, 1995
- i) The Interstate Migrant Workmen Act., 1979 (Regulation of employment and conditions of service)
- j) The Employees Provident Fund and Miscellaneous Provisions Act, 1952
- k) The Rajasthan Tax Act
- l) GST Act
- m) Customs & Excise Act & Rules
- n) Rajasthan Entry Tax Act
- o) Income Tax Act. & Sales Tax Act.
- p) Insurance Act.
- q) HSE Guidelines

30.3 If any expatriate personnel are engaged by the Contractor to perform the services required under the contract, securing permission from the Ministry of External Affairs (MEA), Ministry of Home Affairs (MOHA), Ministry of Defence (MOD) Govt. Of India and Local Authorities on time shall rest on the Contractor. OIL will only assist the Contractor by providing introductory letter / recommendatory letter required, if any, for securing the above permissions.

31.0 **SUBSEQUENTLY ENACTED LAWS:** Subsequent to the date of bid closing, if there is a change in or enactment of any law or change in application or enforcement or interpretation of existing law by any governmental authority or public body, which results in addition/ reduction in cost to Contractor on account of the operation contemplated under the Contract, the Company/Contractor shall reimburse the Contractor/pay Company for such additional/reduced costs actually incurred/saved by Contractor, subject to the submission of documentary evidence by Contractor/Company.

32.0 **SET-OFF:** Any sum of money due and payable to the Contractor (including Performance Security refundable to them) under this or any other Contract may be appropriated by OIL and set-off against any claim of OIL(or such other person or persons contracting through OIL) for payment of a sum of money arising out of this contract or under any other contract made by the Contractor with OIL(or such other person or persons contracting through OIL).

33.0 WITHHOLDING: Company may withhold or nullify the whole or any part of the amount due to Contractor, after informing the Contractor of the reasons in writing, on account of subsequently discovered evidence in order to protect Company from loss on account of :-

- a) For non-completion of jobs assigned as per Section-II.
- b) Contractor's indebtedness arising out of execution of this Contract.
- c) Defective work not remedied by Contractor.
- d) Claims by sub-Contractor of Contractor or others filed or on the basis of reasonable evidence indicating probable filing of such claims against Contractor.
- e) Failure of Contractor to pay or provide for the payment of salaries/ wages, contributions, unemployment compensation, taxes or enforced savings withheld from wages etc.
- f) Failure of Contractor to pay the cost of removal of unnecessary debris, materials, tools, or machinery.
- g) Damage to another Contractor of Company.
- h) All claims against Contractor for damages and injuries, and/or for non-payment of bills etc.
- i) Any failure by Contractor to fully reimburse Company under any of the indemnification provisions of this Contract. If, during the progress of the work Contractor shall allow any indebtedness to accrue for which Company, under any circumstances in the opinion of Company may be primarily or contingently liable or ultimately responsible and Contractor shall, within five days after demand is made by Company, fail to pay and discharge such indebtedness, then Company may during the period for which such indebtedness shall remain unpaid, withhold from the amounts due to Contractor, a sum equal to the amount of such unpaid indebtedness.

Withholding will also be effected on account of the following:-

- i) Order issued by a Court of Law in India.
- ii) Income-tax deductible at source according to law prevalent from time to time in the country.
- i) Any obligation of Contractor which by any law prevalent from time to time to be discharged by Company in the event of Contractor's failure to adhere to such laws.
- iv) Any payment due from Contractor in respect of unauthorised imports.

When all the above grounds for withholding payments shall be removed, payment shall thereafter be made for amounts so withheld.

Notwithstanding the foregoing, the right of Company to withhold shall be limited to damages, claims and failure on the part of Contractor, which is directly/indirectly related to some negligent act or omission on the part of Contractor.

34.0 WAIVER: Any delay in exercising and any omission to exercise any right, power or remedy exercisable by the Company under this contract shall not impair such right, power or remedy nor shall any waiver by the Company of any breach by the Contractor of any provision of this contract prevent the subsequent enforcement of that provision by the Company or be deemed a waiver by the Company of any subsequent breach by the Contractor.

35.0 INGRESS AND EGRESS AT LOCATION:

35.1 The Company shall provide the Contractor, if required, requisite certificates for obtaining rights of ingress to, egress from locations where jobs are to be performed, including any certificates required for permits or licenses for the movement of the Contractor's personnel/equipment. Should such permits/licenses be delayed because of objections of concerned authorities in respect of specific Contractor's person(s), such person (s) should be promptly removed from the list by the Contractor and replaced with acceptable person (s).

36.0 GENERAL HSE GUIDELINES:

36.1 For General guidelines with respect to Health, Safety and Environmental aspects Appendix – A to be referred.

37.0 POLLUTION:

37.1 The contractor shall be liable for all surface pollution to the extent caused by Contractor and resulting from spillage or dumping of solvents/additive substances or pollutants which the Contractor brings to the site for use in connection with work to be performed under this Contract.

37.2 The Company agrees that Contractor shall not be responsible for and company shall indemnify and hold Contractor, its agent, servants, officers and employees harmless from any liability, loss, cost or expenses or loss or damage from pollution or contamination arising out of or resulting from any of Contractor's services/operations unless such pollution or contamination is caused by Contractor's gross negligence.

38.0 Notwithstanding anything to the contrary contained herein, it is agreed that Company shall release, Indemnify and hold Contractor and its sub-contractors harmless from any and all claims, judgments, losses, expenses and any costs related thereto (including but not limited to Court costs and Attorney fees) for

- a) Damage to or loss of any reservoir or producing formation, and/or
- b) Damage or loss of any well, and/or
- c) Any other subsurface damage or loss, and/or
- d) Any property damage or loss or personal injury or death arising out of or in connection with a blowout, fire explosion and loss of well control regardless of cause.

END OF SECTION – IV

SECTION – V

BID REJECTION / EVALUATION CRITERIA (BRC/BEC)

I. BID REJECTION CRITERIA (BRC):

The bid shall conform generally to the specifications and terms and conditions given in the bidding documents. Bids will be rejected in case services offered do not conform to the required parameters stipulated in the technical specifications. Notwithstanding the general conformity of the bid to the stipulated specifications, the following requirements will have to be particularly met by the bidders without which the same will be considered as non- responsive and rejected.

1.0 TECHNICAL:

1.1 The Bidder/MOU partner (in case of Joint Venture Firms/Consortium) shall have experience of executing man management contract for operating and maintaining any Oil or Gas process facilities of handling Crude Oil or Natural Gas in upstream petroleum sector having boiler battery, captive power generation facility (DG Set), firefighting equipment etc. as mentioned under Section-I (Terms of Reference/Scope of Work/Technical Specifications) of the Tender Document. Moreover, the Bidder /MOU partner shall have the experience of working in Oil or Gas installation falling within the purview of DGMS. The Bidder/MOU partner should also have at least 1 (One) Year experience of Operation & Maintenance of the following items in the last five (5) years to be reckoned from the original bid closing date. The bidder shall provide the details as per TABLE given below:

- i) Boiler Battery containing at least one Automatic Boiler of minimum capacity 1 (One) Ton.
- ii) Process and Production facilities handling Crude Oil or Natural Gas having Electronic based instrumentation and control.
- iii) Captive power generation facility of minimum capacity of 100 KVA and electrical systems comprising control panel, MCR Panel, Sub-station, transformer, switch gear etc.
- iv) Firefighting equipment and services. If the bidder does not have experience in the same; then the manpower to be deployed for fire services having experience as mentioned in the Annexure-A under the heading “Key Personnel” of Section-I in the last five (5) years will be accepted as experience of the bidder. In this context, along with the Technical bid the bidder must provide the details of those manpower of fire services along with experience certificates.

Sl. No.	Name of the Company	Name of the Project	Working Duration	Documentary Evidence

1.2 Documents to be submitted for 1.1:

Documents establishing the above experience must be submitted along with the technical bid. These documents shall be in the form of:

- i) Copies of relevant pages of contract document showing contract number, period of contract and detailed Scope of Work etc.
- ii) Copies of experience Certificate(s) or payment certificates or any other documents which substantiate execution of the jobs, issued by the client(s) with contact details of the issuing person/organization (e-mail address, Phone Number, Fax number etc.)

Note: The capacity of the boiler battery shall be clearly mentioned in the documents (i.e. either (i) or (ii) above) submitted by the bidder.

2.0 The contractor shall provide a declaration along with the technical bid that the key manpower to be deployed for the intended work (Ref. Section I, Terms of Reference/Scope of Work/Technical Specifications) shall have the qualification and experience as mentioned under Annexure-A. However, the Bidder shall provide details of qualification, experience and other relevant data of the Key personnel for scrutiny and clearance by the company before actual

deployment. The minimum required quantity, qualification & experience of the key personnel are stipulated in Annexure-A (Section-I) of the tender document under the heading "Key Personnel". The bid is liable for rejection without the declaration certificate, as mentioned.

3.0 Bidders must confirm mobilization & completion of the PART-A & PART-B services as per clause 3.0 of Section-II (SCHEDULE OF RATES AND PRICE BID FORMAT). The bid mentioning mobilization & completion period more than that mentioned in the clause will be rejected. Mobilization is to be done in 30 days from issue of LOA and completion within 120 days from mobilization.

4.0 In absence of direct experience of the Bidder in areas explained in Para 1.1 above, a legally valid MOU with a party having adequate experience as mentioned therein and defined by the following parameters will also be considered:

- a) There must be a clear commitment accountability clause of the partners in the MOU.
- b) Clear indication of MOU validity period covering the entire period of the proposed contract.
- c) Extent of financial stake/equity participation of the MOU partners.
- d) Documentary evidence of MOU partner as indicated in Para 1.2 of above.
- e) A clear undertaking from the MOU partner not to resign from their obligations during the currency of the contract specifically indicated their role in execution of the agreement.

5.0 Bidder(s) quoting in Collaboration / joint venture Partnership/ Consortium with any firm are not allowed to quote separately/independently against this tender. The collaborator is also not allowed to quote separately/independently against this tender. All the bids received in such case will be summarily rejected.

6.0 Any offer which does not include all the jobs/services mentioned in the Scope of Work will be considered as incomplete and rejected.

2.0 The bidder shall be deemed to have visited the site and familiarized himself thoroughly with the site conditions before submitting the tender and quote accordingly. Non familiarity with the site conditions will not be considered a reason for extra claims.

3.0 Bidder has to give an undertaking clearly mentioning that all electrical Jobs under the scope of this tender shall be carried out through competent Electrical personal & supervision done through competent personal holding requisite necessary certificates issued by State Licensing Board.

9.0 Bidder should have experience of successfully executing at least 1(one) similar order for INR 4.5 Crores in preceding 7 (seven) years to be reckoned from the original stipulated bid closing date of the tender. Similar nature implies executing man management contract for operating and maintaining any Oil or Gas process facilities of handling Crude Oil or Natural Gas in upstream petroleum sector having boiler battery, captive power generation facility (DG Set), firefighting equipment etc.

10.0 Documents:

10.1 Bidder must furnish documentary evidences, in support of fulfilling all the above requirements as under along with the Technical (unpriced) bid:

- a) Copies of relevant pages of Contracts & certificates issued by the clients as mentioned in clause 1.2.
- b) A legally valid MOU with the party as per clause 4.0
- c) A declaration to provide the key manpower as per qualifications, experience and number indicated in Annexure-A (Section-I) of the tender document under the heading "Key Personnel".
- d) Bidder must provide an undertaking along with Technical Bid indicating that they have gone through the scope of work and visited the work site for assessment of the job involved and competent enough to carry out the intended work

- e) Copies of experience Certificate(s) or payment certificates or any other documents which substantiate execution of the jobs, issued by the client(s) with contact details of the issuing person/organization (e-mail address, Phone Number, Fax number etc.)

II. FINANCIAL CRITERIA :

1.0 Annual Financial Turnover of the Bidder during any of preceding three financial/ accounting years from the original bid closing date should be at least **INR 4.5 Crores**. In case the bidder is a Consortium of companies, then the minimum annual financial turnover during any of the preceding 03(three) financial/accounting years reckoned from the original bid closing date for the consortium members should be as under:

- i) Atleast One member of the Consortium: **INR 4.50 Crores**.
ii) Other members of the Consortium: **INR 2. 25 Crores**.

2.0 **Net Worth** of the Bidder should be positive for the preceding financial/ accounting year. In case the bidder is a Consortium of companies, then the net worth of all the consortium partners individually should be positive for the financial/accounting year preceding the bid closing date.

3.0 Documentary evidence in the form of Audited Balance Sheet and Profit & Loss Account for the preceding 03(three) financial/accounting years should be submitted along with the technical bid.

Considering the time required for preparation of Financial Statements, if the last date of preceding financial / accounting year falls within the preceding six months reckoned from the original bid closing date and the Financial Statements of the preceding financial / accounting year are not available with the Bidder, then the financial turnover of the previous three financial / accounting years excluding the preceding financial / accounting year will be considered. In such cases, the Net worth of the previous financial / accounting year excluding the preceding financial / accounting year will be considered. However, the Bidder has to submit an affidavit/undertaking certifying that 'the balance sheet/Financial Statements for the financial year (as the case may be) has actually not been audited so far'.

Notes :

- (a) For proof of Annual Turnover & Net worth any one of the following document must be submitted along with the bid:-
ii) A certificate issued by a practicing Chartered Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in ANNEXURE - 1.

OR

- iii) Audited Balance Sheet along with Profit & Loss account. In case of foreign Bidders, self-attested/ digitally signed printed published accounts are also acceptable.

b) In case the Bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General of India and the Central Government, their certificates may be accepted even though FRN is not available. However, Bidder to provide documentary evidence for the same.

3.1 In case the Audited Balance sheet and Profit Loss Account submitted along with the bid are in currencies other than INR or US\$, the Bidder shall have to convert the figures in equivalent INR or US\$ considering the prevailing conversion rate on the date on which the Audited Balance Sheet and Profit & Loss Account is signed. A CA Certificate is to be submitted by the Bidder regarding converted figures in equivalent INR or US\$.

4.0 In case the Bidder is a Consortium, then any one of the Consortium members individually shall have to meet the financial turn-over criteria as per Para II 1.0 above.

5.0 In case the Bidder is subsidiary company (should be a wholly owned subsidiary of the parent/ultimate parent/holding company) who does not meet financial criteria by itself and submits his bid based on the strength of his parent/ultimate parent/holding company, then following documents need to be submitted.

- i) Turnover of the parent/ultimate parent/holding company should be in line with Para II.1.0 above.
- ii) Net Worth of the parent/ultimate parent/holding company should be positive.
- iii) Corporate Guarantee on parent/ultimate parent/holding company's company letter head signed by an authorised official undertaking that they would financially support their wholly owned subsidiary company for executing the project/job in case the same is awarded to them.
- iv) Document of subsidiary company towards wholly owned subsidiary of the parent/ultimate parent/holding company.

III. COMMERCIAL CRITERIA :

The following vital commercial criteria should be strictly complied with failing which the bid will be rejected:

1.0 Bids shall be submitted under single stage two-bid system i.e. Technical Bid and Priced Bid separately. Bids shall be rejected outright if the prices are indicated in the technical bids or if not conforming to this two bid system.

2.0 Bidder shall offer firm prices. Price quoted by the successful Bidder must remain firm during the execution of the contract and not subject to variation on any account.

3.0 Bids with shorter validity i.e, less than **120 days** from the bid closing date shall be rejected as being non-responsive.

4.0 Bid Security in Original shall be furnished as a part of the Technical Bid and shall reach OIL's office at Jodhpur before bid closing date & time. A scanned copy of the bid security shall however be uploaded in OIL's E-Procurement portal along with the Technical Bid. The amount of Bid Security shall be as specified in the Forwarding Letter of the Bid Document. Bid without proper & valid Bid Security shall be rejected.

5.0 The Integrity Pact must be uploaded in OIL's E-Procurement portal along with the Technical Bid duly signed by the same signatory who signed the Bid i.e. who is duly authorized to sign the Bid. If any Bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid shall be rejected straightway.

6.0 Bids received through the e-procurement portal shall only be accepted. Bids received in any other from shall not be accepted.

7.0 Bids submitted after the Bid Closing Date and Time shall be rejected.

8.0 The bid documents are not transferable. Bids made by Bidders who have not been issued the bid documents from the Company shall be rejected.

9.0 Bids shall be typed or written in indelible ink and shall be digitally signed by the Bidder or his authorized representative.

10.0 Bids shall contain no interlineations, erasures or over writing except as necessary to correct errors made by Bidders, in which case such corrections shall be initialed by the person(s) signing the bid.

11.0 Bidders shall bear, within the quoted rates, the personal tax as applicable in respect of their personnel and Sub-Contractor's personnel, arising out of execution of the contract.

12.0 Bidders shall bear, within the quoted rate, the corporate tax as applicable on the income from the contract.

13.0 Bidders shall quote their price exclusive of GST. The GST amount on the taxable part of the goods/services provided by the Contractor shall be paid by the Company as per provisions of the GST Act.

14.0 Any Bid containing false statement shall be rejected.

15.0 Bidders must quote clearly and strictly in accordance with the price schedule outlined in "Price Bid Format" of Bid Document; otherwise the Bid will be summarily rejected.

16.0 Bidder must accept and comply with the following clauses as given in the Bid Document in toto failing which bid will be rejected –

- i) Performance Guarantee Clause
- ii) Force Majeure Clause
- iii) Tax Liabilities Clause
- iv) Arbitration Clause
- v) Acceptance of Jurisdiction and Applicable Law
- vi) Liquidated damage and penalty clause
- vii) Safety & Labor Law
- viii) Termination Clause
- ix) Integrity Pact
- x) Withholding Clause

18.0 Indian Bidders, whose proposal for technical collaboration/joint venture involves foreign equity participation or payment of royalty and/or lump sum for technical know-how and wherever Govt. approval is necessary, are required to submit copy of Govt. approval on their application prior to date of price-bid opening.

IV. BID EVALUATION CRITERIA (BEC):

1.0 The bids conforming to all the services & materials required, technical specifications, terms and conditions stipulated in the tender and considered to be responsive after subjecting to Bid Rejection Criteria will only be considered for further evaluation as per Bid Evaluation Criteria.

2.0 The Bids shall be technically evaluated based on the requirements given in Section – I (Terms of Reference/Scope of works/Technical Specifications). The various requirements including personnel to be deployed by the bidder should meet the tender terms given in the bid document.

3.0 Evaluation of Bids will be as per enclosed Price Schedule Format – I & Price Schedule Format-II for arriving at the total estimated cost of the contract. The headings (s) mentioned in Price Schedule Formats are summarized one for which the details are provided in Section- I of the tender document. Priced Bids will be evaluated on the basis of total cost for Revival Services & Materials (Price Schedule Format-I) & Operation and Maintenance services including optional services for a period of Two (2) years (Price Schedule Format-II) and the contract will be signed with successful bidder accordingly.

4.0 In the event of computational error between unit price and total price, unit price shall prevail.

NOTE: If any of the clauses in the BEC/BRC contradict with other clauses of bidding document elsewhere, then the clauses in the BEC/BRC shall prevail.

V. PURCHASE PREFERENCE:

1.1 MICRO AND SMALL ENTERPRISES (MSEs)

- a) In case participating MSEs quote price within price band of L1+15%, such MSE shall be considered for award of contract by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE. In case of more than one such MSE qualifying for 15% purchase preference, the contract shall be awarded to lowest eligible MSE amongst the MSEs qualifying for 15% purchase preference.
- b) In case any part of the work is sub-contracted to a Micro or Small Enterprise as per contract conditions than the contractor shall provide complete details (i.e. name of the subcontractor, value of sub-contacted work, copy of valid registration certificate etc.) of the sub-contractor to OIL.

1.2 **Documentation Required to be submitted by MSEs:**

Copy of valid Registration Certificate, if bidder is a Micro or Small Enterprises (MSE) registered with District Industry Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of MSME. The Registration Certificate should clearly indicate the monetary limit, if any and the items for which bidder are registered with any of the aforesaid agencies.

In case bidding MSE is owned by Schedule Caste or Schedule Tribe entrepreneur, valid documentary evidence issued by the agency who has registered the bidder as MSE owned by SC/ST entrepreneur should also be enclosed.

1.3 **PURCHASE PREFERENCE POLICY (LINKED WITH LOCAL CONTENT)(PP-LC)**

Purchase preference policy-linked with Local Content (PP - LC) notified vide letter no. O-27011/44/2015-ONG-II/FP dated 25.04.2017 of MoP&NG shall be applicable in this tender. Bidders seeking benefits, under Purchase Preference Policy (linked with Local Content) (PP-LC) shall have to comply with all the provisions specified in Annexure- PP-LC and shall have to submit all undertakings / documents applicable for this policy.

*******(END OF SECTION – V)*******

SECTION - VI

BID FORM

(A) BID-FORM

Date :

Tender No. :

(Insert Bidder's name and address)

Gentlemen,

Having examined the General and Special Conditions of Contract, the Terms of Reference including all attachments thereto, the receipt of which is hereby duly acknowledged, we, the undersigned offer to perform the services in conformity with the said conditions of Contract and Terms of Reference for the sum of (Total Bid amount in words and figures) or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to commence the work within seven days calculated from the date of receipt of mobilization notice from Company against each call (as and when required) during the currency of the contract.

If our Bid is accepted, we will obtain the Guarantee of a Bank for sum of not exceeding 10% of the estimated contract value for the due performance of the Contract.

We agree to abide by the Bid for a period 120 days from the date fixed for Bid opening and it shall remain binding upon us and may be accepted at any time before expiry of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof in your notification of award shall constitute a binding Contract between us.

We understand that you are not bound to accept lowest or any Bid you may receive.

Dated this Day of 2017

(Signature)

(in the capacity of)

Bidder's Name :

Bidder's Address :

******* (END OF SECTION – VI) *******

SECTION – VII

FORM OF BID SECURITY (BANK GUARANTEE)

Ref. No.

Bank Guarantee No.

TO
OIL INDIA LIMITED
For DGM-SERVICES
RAJASTHAN PROJECT
JODHPUR-342005

WHEREAS, (Name of Bidder) (hereinafter called “the Bidder”) has submitted their Bid No. dated for the provision of certain OILFIELD services (hereinafter called “the Bid”) against OIL INDIA LIMITED, RAJASTHAN PROJECT, JODHPUR (hereinafter called the “Company”)’s IFB No..... . KNOW ALL MEN by these presents that we (Name of Bank) of (Name of country) having our registered office at (hereinafter called “the Bank”) are bound unto the Company in the sum of (.....)* for which payment well and truly to be made to Company, the Bank binds itself, its successors and assignees by these presents.

SEALED with the common seal of the said Bank this Day of , 2016.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws their bid during the period of bid validity specified by the Bidder;

Or

2. If the Bidder, having been notified of the acceptance of their bid by the Company during the period of bid validity:

- fails or refuses to execute the Form of Contract in accordance with the

Instructions to Bidders in the tender documents, or

- fails or refuses to furnish the Performance Security in accordance with the Instructions to Bidders in the tender documents;

Or

3. If the Bidder furnishes fraudulent document/information in their bid

We undertake to pay to Company up to the above amount upon receipt of its first written demand (by way of letter/fax/cable/email), without Company having to substantiate its demand, provided that in its demand Company will note that the amount claimed by it is due to it owing to the occurrence of one or two or all of the conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including the date (**) and any demand in respect thereof should reach the bank not later than the above date.

SIGNATURE AND SEAL OF THE GUARANTOR.....

Name of Bank & Address.....

Witness

Address.....

(Signature, Name and Address)

Date.....

Place.....

· The Bidder should insert the amount of the guarantee in words and figuresdenominated in the currency of the Company's country or an equivalentamount in a freely convertible currency.

· The Date of Expiry of Bank Guarantee should be 210 days after the bid closingdate as stated in the tender document

The details of the issuing bank and controlling bank are as under:

A.Issuing Bank

1. Full address of the bank:

2. Email address of the bankers:

3. Mobile nos. of the contact persons:

B.Controlling Office

1. Address of the controlling office of the BG issuing banks:

2. Name of the contact persons at the controlling office with their mobile nos. and email address:

Signature& Seal of the Bank

(END OF SECTION - VII)

SECTION - VIII

FORM OF PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)*

To:

(Name of Company)

(Address of Company)

WHEREAS (Name and address of Contractor) (hereinafter called "Contractor") had undertaken, in pursuance of Contract No..... Dated to execute (Name of Contract and brief description of the work) (hereinafter called "the Contract"), AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a bank guarantee by a recognised bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND

WHEREAS we have agreed to give the Contractor such a Bank Guarantee, now THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, up to a total of (Amount of Guarantee)** (in words) such sum being payable in the type and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of the guarantee sum as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modifications of the terms of the Contract or of the work to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee is valid until the date (.....)**(calculated at **3 months** after Contract completion date).

SIGNATURE & SEAL OF THE GUARANTOR :.....

Name of Bank

:.....

Address :.....

.....

Date :.....

* Bidders are NOT required to complete this form while submitting the bid.

**An amount is to be inserted by the guarantor, representing the percentage of the Contract price specified in the Contract, and denominated either in the currency of the

Contract or in a freely convertible currency acceptable to the Company as per para 29.0 of Part-1.

The details of the issuing bank and controlling bank are as under:

A.Issuing Bank

- 1. Full address of the bank:**
- 2. Email address of the bankers:**
- 3. Mobile nos. of the contact persons:**

B.Controlling Office

- 1. Address of the controlling office of the BG issuing banks:**
- 2. Name of the contact persons at the controlling office with their mobile nos. and email address:**

Signature& Seal of the Bank

(END OF SECTION - VIII)

SECTION-IX

AGREEMENT FORM

This Agreement is made on ____ day of _____ between Oil India Limited, a Government of India Enterprise, incorporated under the Companies Act 1956, having its registered office at Duliajan, Assam and Rajasthan Project Office at Jodhpur in the State of Rajasthan, hereinafter called the "Company" which expression unless repugnant to the context shall include executors, administrators and assignees on the one part, and M/s. _____ (Name and address of Contractor) hereinafter called the "Contractor" which expression unless repugnant to the context shall include executors, administrators and assignees on the other part,

WHEREAS the Company desires that Services _____ (brief description of services) should be provided by the Contractor as detailed hereinafter or as Company may requires;

WHEREAS, Contractor engaged themselves in the business of offering such services represents that they have adequate resources and equipment, material etc. in good working order and fully trained personnel capable of efficiently undertaking the operations and is ready, willing and able to carry out the said services for the Company as per Section-II attached herewith for this purpose and

WHEREAS, Company had issued a firm Letter of Award No. _____ dated _____ based on Offer No. _____ dated _____ submitted by the Contractor against Company's IFB No. _____. All these aforesaid documents shall be deemed to form and be read and construed as part of this agreement/contract. However, should there be any dispute arising out of interpretation of this contract in regard to the terms and conditions with those mentioned in Company's tender document and subsequent letters including the Letter of Award and Contractor's offer and their subsequent letters, the terms and conditions attached hereto shall prevail. Changes, additions or deletions to the terms of the contract shall be authorized solely by an amendment to the contract executed in the same manner as this contract.

NOW WHEREAS, in consideration of the mutual covenants and agreements hereinafter contained, it is hereby agreed as follows -

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. In addition to documents herein above, the following Sections and Annexures attached herewith shall be deemed to form and be read and construed as part of this agreement viz.:

- (a) General Conditions of Contract,
- (b) Scope of Work/Terms of Reference/Technical Specification
- (c) Special Conditions of Contract,
- (d) Schedule of Services/Schedule of Rates,
- (e) Price Bid Format,
- (g) Performance Security Form,
- (h) Agreement Form,
- (i) General HSE Points (Appendix-A)

(m) Procedure for obtaining Labour License under Contract Labour (R&A) Act, 1970 & Central Rules-1971 (Appendix-B)

3. In consideration of the payments to be made by the Company to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Company to provide the Services and to remedy defects therein in conformity in all respect with the provisions of this Contract.

4. The Company hereby covenants to pay the Contractor in consideration of the provision of the Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of this Contract at the times and in the manner prescribed by this Contract.

IN WITNESS thereof, each party has executed this contract at Jodhpur, Rajasthan as of the date shown above.

Signed, Sealed and Delivered,

For and on behalf of
Company (Oil India Limited)

Name:

Status:

In presence of

1.

2.

For and on behalf of Contractor

(M/s. _____)

Name:

Status:

In presence of

1.

2.

* Bidders are NOT required to complete this form.

****(END OF SECTION - IX)****

PROFORMA-I

STATEMENT OF COMPLIANCE (Only exceptions/deviations to be rendered)

SECTION NO. (PAGE NO.)	CLAUSE NO. SUB-CLAUSE NO.	COMPLIANCE/ NON COMPLIANCE	REMARKS

(Authorised Signatory)

Name of the Bidder: _____

NOTE : OIL INDIA LIMITED expects the bidders to fully accept the terms and conditions of the bid document. However, should the bidders still envisage some exceptions/deviations to the terms and conditions of the bid document, the same should be indicated here and put in their Bid. If the proforma is left blank, then it would be presumed that the bidder has not taken any exception/deviation to the terms and conditions of the bid document.

CERTIFICATE OF ANNUAL TURNOVER & NET WORTH

TO BE ISSUED BY PRACTISING CHARTERED ACCOUNTANTS' FIRM ON THEIR LETTER HEAD

TO WHOM IT MAY CONCERN

This is to certify that the following financial positions extracted from the audited financial statements of M/s.....(Name of the Bidder) for the last three(3) completed accounting years up to.....(as the case may be) are correct.

YEAR	TURN OVER In INR(Rs)Crores/Lakhs	NET WORTH In INR(Rs)Crores/ Lakhs

SECTION-X

INTEGRITY PACT

Between

Oil India Limited (OIL) hereinafter referred to as "The Principal"

And

(Name of the bidder).....hereinafter referred to as
"The Bidder/Contractor"

Preamble:

The Principal intends to award, under laid down organizational procedures, contract/s for The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section: 1 -Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

1. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
2. The Principal will, during the tender process treat all Bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
3. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a Page 2 of 6 substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section: 2 -Commitments of the Bidder/Contractor

(1) The Bidder/Contractor commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

1. The Bidder/Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

2. The Bidder/Contractor will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, Subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

3. The Bidder/Contractor will not commit any offence under the relevant Anticorruption Laws of India; further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

4. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(2) The Bidder/Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(3) The Bidder/Contractor signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter.

Section 3 -Disqualification from tender process and exclusion from future Contracts

If the Bidder, before contract award has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or risibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

1. If the Bidder/Contractor has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into

question, the Principal is entitled also to exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressions within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.

2. The Bidder accepts and undertakes to respect and uphold the Principal's Absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.

3. If the Bidder/Contractor can prove that he has restored/recouped the Damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

4. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.

5. Integrity Pact, in respect of a particular contract, shall be operative from the date Integrity Pact is signed by both the parties till the final completion of the contract **or as mentioned in Section 9- Pact Duration whichever is later**. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings

Section 4 -Compensation for Damages

1. If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit / Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to Security Deposit / Performance Bank Guarantee.

3. The bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder/Contractor can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount or the liquidated damages, the Bidder/Contractor shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 -Previous transgression

1. The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section: 6 -Equal treatment of all Bidders/Contractor/Subcontractors

1. The Principal will enter into Pacts on identical terms with all bidders and contractors.
2. The Bidder / Contractor undertake(s) to procure from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the provisions laid down in this agreement/Pact by any of its sub-contractors/sub-vendors.
3. The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section: 7 -Criminal charges against violating Bidders/Contractors/Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor, which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section: 8 -External Independent Monitor/Monitors

1. The Principal appoints competent and credible external independent Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
2. The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
3. The Contractor accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.

4. The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

5. As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. **However, the Independent External Monitor shall give an opportunity to the bidder / contractor to present its case before making its recommendations to the Principal.**

6. The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.

7. If the Monitor has reported to the Chairperson of the Board a Substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8. The word 'Monitor' would include both singular and plural.

Section:9 -Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by Chairperson of the Principal.

Section:10 -Other provisions

1. This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. New Delhi. **The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.**

2. Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

3. If the Contractor is a partnership or a consortium, this agreement must be, signed by all partners or consortium members.

4. Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

.....
For the Principal

.....
For the Bidder/Contractor

Witness 1:

Witness 2:

Place.
Date .

*******END OF SECTION- X*******

GENERAL HSE POINTS

1.0 It will be solely the Contractor's responsibility to fulfill all the legal formalities with respect in the Health, Safety & Environmental aspects of the entire job (namely, the persons employed by him, the equipment, the environment etc.) under the jurisdiction of the district of that state where it is operating. Ensure that all sub Contractors hired by him comply with the same requirement as the Contractor himself and shall be liable for ensuring compliance all HSE laws by the sub or sub Contractors.

2.0 Every person deployed by the Contractor in a mine must wear safety gadgets to be provided by the Contractor. The Contractor shall provide proper Personnel Protective Equipment as per the hazard identified and risk assessed for the job and conforming to statutory requirement and the Company PPE schedule. Safety appliances like protect footwear, safety helmet and full body harness has to be DGMS approved. Necessary supportive document shall have to be submitted as proof. If the Contractor fails to provide the safety items as mentioned above to the working personnel, the Contractor may apply to the Company (OIL) for providing the same. OIL will provide the safety items, if available, but in turn. OIL will recover the actual cost of the items by deducting from Contractor's bill. However, it will be the Contractor's sole responsibility to ensure that the persons engaged by him in the mines use the proper PPE while at work. All the safety gears mentioned above are to be provided to the working personnel before commencement of the work.

3.0 The Contractor shall prepare written Safe Operating Procedure (SOP) for the work to be carried out, including as assessment of risk, wherever possible and safe methods to deal with it/them. The SOP should clearly state the risk arising to men, machineries and materials from the mining operation/operations to be done by the Contractor and how it is to be managed.

4.0 The Contractor shall provide a copy of SOP to the person designated the Mine Owner who shall be supervising the Contractor's work.

5.0 Keep an up to date SOP and provide a copy to changes to a person designed by the Mine Owner/Agent/Manager

6.0 The Contractor has to ensure that all work is carried out in accordance with the Statute and SOP and for the purpose he may deploy adequate qualified and competent personnel for the purpose of carrying out the job in a safe manner. For work of a specified scope/nature, he should develop and provide to the Mine Owner a site

7.0 All persons deployed by the Contractor for working in mine must undergo Mines Vocational Training, initial medical examination, PME. They should be issued cards stating the name of the Contractor and the work and its validity period, indicating status of MVT, IME & PME.

8.0 The Contractor shall submit to DGMS indicating – name of his firm Registration Number, name & Address of person heading the firm, nature of work, type of deployment of work persons, No. of work persons deployed, how many work persons hold VT Certificate, how many work persons undergone IME and type of medical coverage given to the work persons.

9.0 The return shall be submitted quarterly (within 10 days) for contracts of more than one year. However, for contracts of less than one year, returns shall be submitted monthly.

10.0 It will be entirely the responsibility of the Contractor/ his Supervisor/Representative to ensure strict adherence to all HSE measures and statutory rules during operation in Oil's installations and safety of workers engaged by him. The crew members will not refuse to follow any instruction given by the Company's Installation Manager/Safety Officer/Engineer/Official/Supervisor/Junior Engineer for safe operation.

11.0 Any compensation arising out of the job carried out by the Contractor whether related to pollution, Safety or Health will be paid by the Contractor only.

12.0 Any compensation arising due to accident of the Contractor's personnel while carrying out the job, will be payable by the Contractor.

13.0 The Contractor shall have to report all incidents including near miss to installation manager/Departmental Representative of concerned department of OIL.

14.0 The Contractor has to keep a register of the persons employed by him/her. The Contractor's supervisor shall take and main attendance of his men every day for the work, punctuality.

15.0 If the Company arranges any safety class/training for the working personnel at site (Company employees, Contractor worker etc.) the Contractor will not have any objection to any such training.

16.0 The health check up of Contractor's personnel is to be done by the Contractor in authorized Health Centers as per Oil's requirement & proof of such test(s) is to be submitted to OIL. The frequency of periodic medical examinations should be every five years for the employees below 45 years of age and every three years for employees of 45 years of age and above.

17.0 To arrange daily tool box meeting and regular site safety meeting and maintain records.

18.0 Records of daily attendance, accident report etc. are to be maintained in Form B.EJ (as per Mines Rules 1955) by the Contractor

19.0 A Contractor employee must, while at work, take reasonable care for the health and safety of people who are all the employee's place of work and who may be affected by the employee's act or omissions at work.

20.0 A Contractor employee must, while at work, co-operate with his or her employer or other persons so far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.

21.0 Contractor's arrangements for health for health and safety management shall be consistent with those for the mine owner.

22.0 In case Contractor is found non-compliant of HSE laws as required the Company will have the right for directing the Contractor to take action comply with the requirements, and for further non-compliance, the Contractor

23.0 When there is a significant risk to health, environment or safety of a persons or pace arising because of a non-compliance of HSE measure the Company will have the right to direct the Contractor to cease work until the non-compliance is corrected.

24.0 The Contractor should prevent the frequent change of his contractual employees as far as practicable.

25.0 The Contractor should frame a mutually agreed bridging document between OIL and the Contractor with roles and responsibilities clearly defined.

26.0 For any HSE matters not specified in the Contract document, the Contractor will abide the relevant and prevailing Acts/Rules/Regulations pertaining to Health, Safety and Environment.

.....

Procedure for obtaining Labour License under Contract Labour (R&A) Act, 1970 & Central Rules-1971

Every Contractor to whom this Act applies shall execute any work through Contract Labour only after obtaining valid license from Licensing Officer. To obtain license contractor is required to submit:

- i) Application in Form IV in triplicate duly filled (Name of the Proprietor/Partner or the Directors/Responsible person in case of firm/company, complete postal address including Pin Code number, Telephone Number, Fax Number & E-mail address, if any), correct details of PE and work to be executed etc. correctly against all columns;
- ii) In case contractor is registered under the Companies Act and applicant is other than Director then he should be holding valid Power of Attorney.
- iii) Original Form-V issued by PE
- iv) Demand Draft for license fees and security deposit payable in favour of Regional Labour Commissioner (Central), Ajmer along with duly filled central challan (in TR-6) duly signed by applicant in quadruplicate for each demand draft;
- v) Copy of Work Order;
- vi) Copy of Partnership Deed and in case of Company, the application should be accompanied with Memorandum of Association/Article of Association;

Note: 1. Application form complete in all respect shall be either personally delivered to the Licensing Officer or can be sent by Registered A.D. Post.

2. Contractors, may intimate Dy. Chief Labour Commissioner (Central), Ajmer for expediting/suitable action if they do not receive license nor any communication within a week.

3. Contractors are not required to visit office of Licensing Officer unnecessarily for obtaining license until and unless they have been specifically advised to appear in person. Appearance of contractors in the office of licensing officer for obtaining license by persuasion will be viewed seriously.

Provisions for procurement of Services pertaining to Oil & Gas business activities covered under Purchase preference Policy (linked with Local Content) (PP-LC).

Purchase preference policy (linked with Local Content) (PP-LC) notified vide letter no.O-27011/44/2015-ONG-II/FP dated 25.04.2017 of MoPNG

1. In case a bidder is eligible to seek benefits under PP-LC policy as well as Public Procurement Policy for MSEs - Order 2012, then the bidders should categorically seek benefits against only one of the two policies i.e. either PP-LC or MSE policy. If a bidder seeks free of cost tender document under the MSE policy, then it shall be considered that the bidder has sought benefit against the MSE policy and this option once exercised cannot be modified subsequently.
2. Bidders seeking Purchase preference (linked with local content) (PP-LC) shall be required to meet / exceed the target of Local Content (LC) of **30%**
- 2.1 Such bidders shall furnish following undertaking on its letter head along with their techno-commercial bid. The undertaking shall become a part of the contract.

"We _____ (Name of the bidder) undertake that we meet the mandatory minimum Local Content (LC) requirement i.e. _____ (to be filled as notified at Enclosure I of the policy) for claiming purchase preference linked with Local Contents under the Govt. policy against under tender no. _____."

2.2 Above undertaking shall be supported by the following certificate from Statutory Auditor engaged by the bidder, on the letter head of such Statutory Auditor.

"We _____ the statutory auditor of M/s _____ (name of the bidder) hereby certify that M/s _____ (name of the bidder) meet the mandatory Local Content requirements of the Services i.e. _____ (to be filled as notified at Enclosure I of the policy) quoted vide offer No. _____ dated _____ against OIL tender No. _____ by M/s _____ (Name of the bidder)."

Note : In case of bidder(s) for whom Statutory Auditor is not required as per law required certificates shall be provided by a practicing Chartered Accountant.

2.3 At the bidding stage the bidder shall provide Break-up of "Local Component" and "Imported Component" in the prescribed format enclosed as Enclosure – III of the policy document of the policy and shall be uploaded by the bidders along with their price bid in the e-procurement portal.

3. Eligible (techno-commercially qualified) LC bidder shall be granted a purchase preference to 10% i.e. where the evaluated price is within 10% of the evaluated lowest price of Non Local Content (NLC) bidder, other things being equal. Accordingly, purchase preference shall be granted to the eligible (techno-commercially qualified) LC bidder concerned, at the lowest valid i.e. NLC price bid.

3.1 Only those LC bidders whose bids are within 10% of the NLC L1 bid would be allowed an opportunity to match L1 bid. All the eligible LC bidders shall be asked to submit their confirmation to match their price in sealed envelopes. Envelopes of the bidders shall be opened and award for the prescribed quantity shall be made to the lowest evaluated TA/CA (Techno- Commercial Acceptable) bidder among the eligible LC bidders. In case the lowest eligible LC bidder fails to match L1 price, the next eligible LC bidder will be awarded the prescribed quantity and so on. In case none of the eligible LC bidders matches the L1 bid, the actual bidder holding L1 price will secure the order.

4. Order for supply of 50% of the tendered quantity would be awarded to the lowest techno-commercially qualified LC bidder, subject to matching with valid NLC L1 price. The remaining will be awarded to L1 (i.e. NLC bidder). Prescribed 50% tendered quantity for LC bidders shall not be further sub-divided among eligible LC bidders.

4.1 However, if L1 bidder happens to be a LC bidder, the entire procurement value shall be awarded to such bidder.

4.2 When the tendered goods/services cannot be divided in the exact ratio of 50% / 50% then OIL reserve the right to award on lowest eligible PP-LC bidder for quantity not less than 50%, as may be AMDT. No. 3 to Tender No. CJI5739P18

dividable. For example - In case tendered quantity is 3 (not divisible in the ratio of 50:50), PP-LC bidder shall get order for 2 nos. only and the rest will go to L-1 (NLC bidder).

OR

(Alternate clause applicable for cases where tendered quantity cannot be divided).

4. The tendered quantity is not splittable / non-dividable / cannot be procured from multiple sources. Hence, the entire procurement value shall be awarded to the lowest techno-commercially qualified LC bidder subject to matching with valid NLC L1 rates.

5. For the purpose of this policy, all terms used vide aforesaid policy shall be governed by the definitions specified at para 2 of the policy document notified by MoPNG vide letter No. O-27011/44/2015-ONG-II/FP dated 25.04.2017.

6. The successful bidder shall be obliged to fulfill the requirements of quality and delivery time in accordance with the provisions of the Purchase order/contract.

7. OIL shall have the right to satisfy itself of the production capability and product quality of the manufacturer.

8.0 Determination of LC

8.1 LC of Services shall be calculated on the basis of the ratio of service cost of domestic component in service to the total cost of services.

8.2 The total cost of service shall be constituted of the cost spent for rendering of service, covering :

- a) Cost of component (material), which is used.
- b) Manpower and consultant cost, cost of working equipment/facility, and
- c) General service cost, excluding profit, company overhead cost, taxes and duties.

8.3 The criteria for determination of cost of local content in the service shall be as under :

- a) In the case of material being used to help the provision of service, based on country of origin.
- b) In the case of manpower and consultant based on INR component of the services contract.
- c) In the case of working equipment/facility, based on country of origin and
- d) In the case of general service cost, based on the criteria as mentioned in clauses a, b and c above.
- e) Indian flag vessels in operation as on date.

8.4 Determination of Local Content : The determination of local content of the working equipment/facility shall be based on the following provision.

Working equipment produced in the country is valued as 100% (one hundred percent) local content, working equipment produced abroad is valued as much as nil (0% percent) local content.

9.0 Calculation of LC and Reporting

9.1 LC shall be calculated on the basis of verifiable data. In the case of data used in the calculation of LC verifiable, the value of LC of the said component shall be treated as nil.

9.2 Formats for the calculation of LC of services may be seen at Enclosure-III of the policy document.

10.0 Certification and Verification

10.1 Bidder seeking Purchase Preference under the policy, shall be obliged to verify the LC of goods as follows :

10.1.2 At bidding stage :

- a) Price Break-up
 - (i) The bidder shall provide break-up of "Local Component" and "Imported Component" along with the price bid as per provisions under clause 2.3.

- (ii) Bidder must have LC in excess of the specified requirement.
- b) Undertaking by the bidder
 - i. The bidder shall submit undertaking along with the techno-commercial bid as per clause no.2.1, such undertaking shall become a part of the contract.
 - ii. Bidder shall also submit the list of items / services to be procured from Indian manufacturers / service providers.
- c) Statutory Auditor's Certificate

The Undertaking submitted by the bidder shall be supported by a certificate from Statutory Auditor as per clause 2.2.

10.1.3 After Contract Award

- a) In the case of procurement cases with the value less than Rs. 5 crore (Rupees Five Crore), the LC content may be calculated (self-assessment) by the contractor and certified by the Director/Authorized Representative of the Company.
- b) The verification of the procurement cases with the value Rupees Five Crore and above shall be carried out by a Statutory Auditor engaged by the bidder.

10.2 Each supplier shall provide the necessary local content documentation to the statutory auditor, which shall review and determine the local content requirements have been met and issue of local content certificate to that effect on behalf of OIL, stating the percentage of local content in the good or service measured. The Auditor shall keep all necessary information obtained from suppliers for measurement of Local Content confidential.

10.3 The Local Content certificate shall be submitted along with each invoice raised. However, the % of local content may vary with invoice while maintaining the overall % of Local Content for the total work/purchase of the pro-rata Local Content requirement. In case, it is not satisfied cumulatively in the invoices raised up to that stage, the supplier shall indicate how the local content requirement would be met in the subsequent stages.

10.4 Where currency quoted by the bidder is other than Indian Rupee then the bidder claiming benefits under PP-LC shall consider exchange rate prevailing on the date of notice inviting tender (NIT) for the calculation of Local Content.

10.5 OIL shall have the authority to audit as well as witness production processes to certify the achievement of the requisite local content.

11 Sanctions

11.1 OIL shall impose sanction on bidder not fulfilling LC of goods/services in accordance with the value mentioned in certificate of LC.

11.2 The sanctions may be in the form of written warning, financial penalty and blacklisting.

11.3 If the bidder does not fulfill his obligation after the expiration of the period specified in such warning. OIL shall initiate action for blacklisting such bidder/ successful bidder.

11.4 A bidder who has been awarded the contract after availing Purchase Preference is found to have violated the LC provision, in the execution of the procurement contract of goods and/or services shall be subject to financial penalty over and above the PBG value prescribed in the contract and shall not be more than an amount equal to 10% of the Contract Price.

11.4.1 In pursuance of the clause No.11.4 above, towards fulfillment of conditions pertaining to Local Contents in accordance with the value mentioned in the certificate of LC, the bidder shall have to submit additional Bank Guarantee (format attached at Enclosure B) equivalent to the amount of PBG.

Proforma of Bank Guarantee towards Purchase Preference – Local Content

Ref. No. _____

Bank Guarantee No. _____

Dated _____

To
Oil India Limited_____
India

Dear Sirs,

1. In consideration of _____ (hereinafter referred to as OIL, which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and assignees) having entered into a CONTRACT No. _____ dated _____ (hereinafter called 'the CONTRACT' which expression shall include all the amendments thereto) with M/s _____ having its registered/head office at _____ (hereinafter referred to as the 'CONTRACTOR') which expression shall, unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees) and OIL having agreed that the CONTRACTOR shall furnish to OIL a Bank guarantee for India Rupees/US\$ _____ for the faithful fulfillment of conditions pertaining to Local Content in accordance with the value mentioned in the certificate of Local Content submitted by the contractor for claiming purchase preference under the Purchase Preference Policy (linked with Local Content).

2. We (name of the bank) _____ registered under the laws of _____ having head/registered office at _____ (hereinafter referred to as "the Bank", which expression shall, unless repugnant to the context or meaning thereof, include all its successors, administrators, executors and permitted assignees) do hereby guarantee and undertake to pay to OIL immediately on first demand in writing any / all money to the extent of Indian Rs./US\$ (in figures) _____ (Indian Rupees/US Dollars (in _____ words) _____) without any demur, reservation, contest or protest and/or without any reference to the CONTRACTOR. Any such demand made by OIL on the Bank by serving a written notice shall be conclusive and binding, without any proof, on the bank as regards the amount due and payable, notwithstanding any dispute(s) pending before any Court, Tribunal, Arbitrator or any other authority and/or any other matter or thin whatsoever, as liability under these presents being absolute and unequivocal. We agree that the guarantee herein contained shall be irrevocable and shall continue to be enforceable until it is discharged by OIL in writing. This guarantee shall not be determined, discharged or affected by the liquidation, winding up, dissolution or insolvency of the CONTRACTOR and shall remain valid, binding and operating against the bank.

3. The Bank also agrees that OIL at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance, without proceeding against the CONTRACTOR and notwithstanding any security or other guarantee that OIL may have in relation to the CONTRACTOR's liabilities.

4. The Bank further agrees the OIL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said CONTRACT or to extend time of performance by the said CONTRACTOR(s) from time to time or to postpone for any time or from time to time exercise of any of the powers vested in OIL against the said CONTRACTOR(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said CONTRACTOR(s) or for any forbearance, act or omission on the part of OIL or any indulgence by OIL to the said CONTRACTOR(s) or any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

5. The Bank further agrees that the Guarantee herein contained shall remain in full force during the period that is taken for the performance of the CONTRACT and all dues of OIL under or by virtue of this CONTRACT have been fully paid and its claim satisfied or discharged or till OIL discharges this guarantee in writing, whichever is earlier.

6. This Guarantee shall not be discharged by any change in our constitution, in the constitution of OIL or that of the CONTRACTOR.

7. The Bank confirms that this guarantee has been issued with observance of appropriate laws of the country of issue.

8. The Bank also agrees that this guarantee shall be governed and construed in accordance with Indian Laws and subject to the exclusive jurisdiction of Indian Courts of the place from where the purchase CONTRACT has been placed.

9. Notwithstanding anything contained herein above, out liability under this Guarantee is limited to Indian Rs./US\$(in figures) _____ (Indian Rupees/US Dollars (in words) _____) and our guarantee shall remain in force until _____(indicate the date of expiry of bank guarantee).

Any claim under this Guarantee must be received by us before the expiry of this Bank Guarantee. If no such claim has been received by us by the said date, the rights of OIL under this Guarantee will cease. However, if such a claim has been received by us within the said date, all the rights of OIL under this Guarantee shall be valid and shall not cease until we have satisfied that claim.

In witness whereof, the Bank through its authorized officer has set its hand and stamp on this _____ date of _____ 20____ at _____

WITNESS NO.1

(Signature)
Full name and official address
(in legible letters)
Stamp

(Signature)
Full name, designation and address
(in legible letters)
With Bank

WITNESS NO.2

Attorney as per power of
Attorney No. _____
Dated _____

(Signature)
Full name and official address
(in legible letters)
Stamp

Formats for calculation of Local Content in Goods/Services/EPC Contracts:

SERVICE:: (As per Enclosure III of PP-LC Policy)

CALCULATION OF LOCAL CONTENT- SERVICE

NAME OF SUPPLIER OF GOODS/PROVIDER OF SERVICE			Cost Summary				
			Domestic	Imported Rs./Foreign Currency (To be specified by the service provider)	Total	LC	
						%	Rs./Foreign Currency (To be specified by the service provider)
			a	b	c = a+b	d = a/c	e = cxd
A	Cost component						
	I. Material used cost	Rs./Foreign Currency					
	II. Personnel & Consultant cost	Rs./Foreign Currency					
	III. Other services cost	Rs./Foreign Currency					
	IV. Total cost (I to IV)	Rs./Foreign Currency					
B	Taxes and Duties	Rs./Foreign Currency					
C	Total quoted price	Rs./Foreign Currency					

Note:

$$\% \text{ LC Service} = \frac{\text{Total cost (A.IV.c)} - \text{Total imported component cost (A.IV.b)}}{\text{Total Cost (A.IV.c)}} \times 100$$

$$\% \text{ LC Service} = \frac{\text{Total domestic component cost (A.IV.a)}}{\text{Total Cost (A.IV.c)}} \times 100$$

As regards cases where currency quoted by the bidder is other than Indian Rupee, exchange rate prevailing on the date of notice inviting tender (NIT) shall be considered for the calculation of Local Content. *(Applicable only for Foreign Purchase / Global Tenders)*

--END OF TEND--
